DOCUMENT RESUME

ED 279 493 SE 047 758

AUTHOR Fox, Joan; And Others
TITLE Comprehensive Instructional Management System (CIMS). A Cyclical Mathematics Curriculum. Workbook Part 2. Experimental. Level 4.
INSTITUTION New York City Board of Education, Brooklyn, N.Y. Div. of Curriculum and Instruction.
REPORT NO Curric-03-2004-23; ISBN-88315-548-6
PUB DATE 86
NOTE 115p.; For Part 1 workbook, see SE 047 757; for teacher manuals, see SE 047 759-760.
AVAILABLE FROM New York City Board of Education, Curriculum Editorial and Production Unit, Office of Curriculum Development and Support, Room 613, 131 Livingston St., Brooklyn, NY 11201.
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Drills (Practice); *Educational Objectives; *Elementary School Mathematics; Grade 4; *Instructional Materials; Intermediate Grades; *Mathematics Curriculum; *Mathematics Instruction; Teacher Developed Materials; Workbooks
IDENTIFIERS New York City Board of Education

ABSTRACT

The activities in this workbook are designed to provide pupils with practice in mastering the performance objectives of the Comprehensive Instructional Management System in mathematics for Level 4, Part 2, in New York City schools. It follows the sequence of the teacher's manual, with the objective number listed on each page. Over 80 performance objectives are listed, followed by worksheets for pupils. (MNS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

EXPERIMENTAL ★

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
T.K. Minter

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED279493

CIMS

COMPREHENSIVE INSTRUCTIONAL MANAGEMENT SYSTEM

A Cyclical Mathematics Curriculum

Workbook Part 2

NEW YORK CITY BOARD OF EDUCATION
OFFICE OF CURRICULUM DEVELOPMENT AND SUPPORT
DIVISION OF CURRICULUM & INSTRUCTION

ISBN No. 88315-548-6

Curric. No. 03-2004-23

2

BEST COPY AVAILABLE

SE 047 158

NEW YORK CITY BOARD OF EDUCATION

Robert F. Wagner, Jr., President
Irene Impellizzeri, Vice President

Gwendolyn C. Baker
Richard I. Beattie
Stephen R. Franse
James F. Regan
Edward L. Sadowsky

Nathan Quinones, Chancellor

Charles I. Schonhaut, Deputy Chancellor

Jerald Posman, Deputy Chancellor for Financial Affairs

Charlotte Frank, Executive Director
Division of Curriculum and Instruction

Morris Freedman, Deputy Executive Director
Pearl Warner, Deputy Executive Director

Copyright 1986 by the Board of Education of the City of New York

Application for permission to reprint any section of this material should be made to the Chancellor, 110 Livingston Street, Brooklyn, N.Y. 11201. Reprint of any section of this material should carry the line, "Reprinted from CIMS - Comprehensive Instructional Management System, A Cyclical Mathematics Curriculum by permission of the Board of Education of the City of New York."

Original cover design by Marvin Schneider

It is the policy of the New York City Board of Education not to discriminate on the basis of race, creed, national origin, age, handicapping condition, or sex in its educational programs, activities, and employment policies, as required by law. Inquiries regarding compliance with appropriate laws may be directed to Mercedes Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Brooklyn, New York 11201; or to Mr. Charles Tejada, Director, Office of Civil Rights, Department of Education, 26 Federal Plaza, Room 33-130, New York, New York 10278.

ISBN No. 88315-548-6

Curric. No. 03-2004-23

Copies of this publication may be purchased from: the Curriculum Editorial and Production Unit of the Office of Curriculum Development and Support, Room 613, 131 Livingston Street, Brooklyn, N.Y. 11201. Checks should be made payable to "Sale of Syllabi."

See catalogue for price.

FOREWORD

The Comprehensive Instructional Management System (CIMS) is a unified mathematics curriculum for grades K-7. The curriculum is cyclical in design, and reflects the most recent New York City and New York State guidelines.

Utilizing the experience of our system's teachers, we have developed a teacher-designed curriculum that includes a rich selection of classroom-tested successful mathematics activities. The major goal of the CIMS mathematics project is to provide the classroom teacher with a well-structured, objective-based curriculum. All objectives are supported by a variety of strategies. Student mastery of these objectives is readily diagnosed through the system's testing component.

The curriculum format is structured to allow the teacher to determine the ability level of the students in the topic under study, and to permit the students to move forward at their individual rates. Each module of instruction provides the teacher with a set of related performance objectives. These objectives are supported by activities which probe and develop the students' readiness to undertake new skills and concepts. Further reinforcement is given to mastery of the objectives through accompanying student workbooks.

It is hoped that this curriculum will not only assist teachers in developing vital mathematics instruction, but will serve to expand and enrich students' mathematics skills.

Charlotte Frank

Charlotte Frank,
Executive Director
Division of Curriculum and Instruction

ACKNOWLEDGMENTS - 1986

The Comprehensive Instructional Management System (CIMS) was developed as a project of the Division of Curriculum and Instruction, Mrs. Charlotte Frank, Executive Director. Mr. Bernard Mecklowitz, Community School Superintendent CSD 1; Dr. Peter Negroni, Community School Superintendent CSD 12; Dr. Harvey Garner, Community School Superintendent CSD 18; Mr. Carlos Edwards, Community School Superintendent CSD 23, and Mr. Joseph Pacheco, Community School Superintendent CSD 32 supervised the overall development of the CIMS program within their respective districts.

Morris Freedman, Director of the Office of Curriculum Development and Support; Irwin Kaufman, Director of Technology, Assigned to the Chief Executive for Instruction; Gerald Elgarten, Director of Mathematics, 1984-85; Lorraine Largmann, Director of Mathematics 1985-86; Susan Zakaluk, Director of Mathematics; Marjorie McAllister, Director of Early Childhood Education; Kenneth Bates, Director of CIMS; Maria DeSalvio, Assistant Director of Mathematics; Arthur Flug and Doreen Genkin, Assistant Directors of CIMS and Gene Menchini, Assistant to the Director for Systems Planning and Coordination, ODPC provided overall supervision of the project.

DIVISION OF SPECIAL EDUCATION

Overall supervision of curriculum in addressing those students with special needs was coordinated by Edward M. Sermier, Chief Administrator, Division of Special Education.

Gloria Cole, Director of Office of Program Development; Lorelle Lawson, Administrator, Curriculum Development Unit of the Office of Program Development and Roslyn Persky, Deputy Assistant Administrator to the Director of Office of Program Development, Special Education provided guidance and support in addressing these special needs.

PRINCIPAL WRITERS

The principal writers responsible for planning the scope, sequence, and engaging in the necessary research in the revision of the modules were:

Joan Fox, CIMS Sr. Curriculum Leader
Constance Goldsby, CIMS Sr. Curriculum Leader
Andrea Raskin, CIMS Sr. Curriculum Leader
Stephanie Thier, CIMS Curriculum Leader
Howard Wholl, CIMS Curriculum Leader

CIMS CURRICULUM DEVELOPERS/EDITORS

Judi Aronson	Spec. Ed. Staff Dev.	Lenore M. Messina	CSD 32 P.S. 75K
Marilyn Bell	CSD 6 Elem. Math Coord.	Selma Mitlitsky	CSD 18 Math Coord.
Abraham Butensky	CSD 23 P.S. 165K	Joseph Porzio	CSD 19 Asst. Dir. Math.
Kenneth Dallow	CSD 19 Staff Dev.	Rochelle Watnick	CSD 27 P.S. 197Q
Laura Lederman	CSD 26 J.H.S. 158Q	Roslynn Wiesenfeld	CSD 32 P.S. 145K

ILLUSTRATORS

Anita Janosova	H.S. Fine Arts	Ellen Evjen	J.H.S. Fine Arts
		Gioia Venezia	H.S. Fine Arts

PRODUCTION

Alaire Mitchell, Unit Head, Curriculum Editorial Unit
Maureen Maguire, Production Coordinator, Curriculum Editorial Unit
Dorothy C. Johnson, Office Associate, CIMS
Rosa Martin, Office Aide
Maria Elena Falcon, Office Aide

ACKNOWLEDGMENTS - 1985

The Comprehensive Instructional Management System (CIMS) was developed as a project of the Division of Curriculum and Instruction, Charlotte Frank, Executive Director. Mr. Bernard Mecklowitz, Community School Superintendent CSD 1; Dr. Peter Negroni, Community School Superintendent CSD 12; Dr. Harvey Garner, Community School Superintendent CSD 18; Carlos Edwards, Community School Superintendent CSD 23, and Joseph Pacheco, Community School Superintendent CSD 32 supervised the overall development of the CIMS program within their respective districts.

Morris Freedman, Director of the Office of Curriculum Development and Support; Irwin Kaufman, Director of Technology, Assigned to the Chief Executive for Instruction; Gerald Elgarten, Director of Mathematics, 1984-85; Lorraine Largmann, Director of Mathematics (Interim Acting); Marjorie McAllister, Director of Early Childhood Education; Kenneth Bates, Director of CIMS; Maria DeSalvio, Assistant Director of Mathematics; Arthur Flug and Doreen Genkin, Assistant Directors of CIMS and Gene Menchini, Assistant to the Director for Systems Planning and Coordination, ODPC provided overall supervision of the project.

DIVISION OF SPECIAL EDUCATION

Overall supervision of curriculum in addressing those students with special needs was coordinated by Edward M. Sermier, Chief Administrator, Division of Special Education.

Gloria Cole, Director of Office of Program Development; Lorelle Lawson, Administrator, Curriculum Development Unit of the Office of Program Development and Roslyn Persky, Deputy Assistant Administrator to the Director of Office of Program Development, Special Education provided guidance and support in addressing these special needs.

PRINCIPAL WRITERS

The principal writers responsible for planning the scope, sequence and engaging in the necessary research in revising of the modules were:

Judith Fein, CIMS Curriculum Leader
Joan Fox, CIMS Curriculum Leader
Constance Goldsby, CIMS Curriculum Leader
Andrea Raskin, CIMS Curriculum Leader

CIMS CURRICULUM DEVELOPERS

Sara Jane Bass	H.S. Mathematics	Joseph Porzio	CSD 19 Staff Dev.
Abraham Butensky	CSD 23 P.S. 165K	Roslynn Wiesenfeld	CSD 32 P.S. 145K
Merle Glass	CSD 18 P.S. 219K	Bernice Zuckerman	CSD 19 Staff Dev.
Sherri Heitner	Special Ed. CSD 4	Frederick Zwibel	Sp. Ed. Bklyn East
Lenore M. Messina	CSD 32 Asst. Math. Supv. I.A.		

EDITORS

Wallace Dimson	CSD 23 Math Coord.	Fred Remer	CSD 6 Mathematics Dir.
Aurora Larocca	CSD 32 Math. Coord.	Mary Teshara	CSD 12 Math. Coord.
Laura Lederman	CSD 26 J.H.S. 158Q	Rochelle Watnick	CSD 27 P.S. 197Q
Selma Mitlitsky	CSD 18 Math. Coord.	Stewart Weiner	CSD 1 Math. Coord.

ILLUSTRATORS

Kathleen Asvestas	CSD 15 P.S. 321K	Anita Woest	H.S. Fine Arts
Charles Flisser	CSD 11 P.S. 105X	Tom Wright	Graphic Artist
Gioia Venezia	Graphic Artist	Catherine Nunn	Graphic Artist

PRODUCTION

Alaire Mitchell, Unit Head, Curriculum Editorial Unit
Maureen Maguire, Production Coordinator, Curriculum Editorial Unit
Dorothy C. Johnson, Office Associate, CIMS

ACKNOWLEDGMENTS - 1984

The Comprehensive Instructional Management System (CIMS) was developed as a project of the Division of Curriculum and Instruction, Charlotte Frank, Executive Director. Dr. Peter Negroni, Community School Superintendent CSD 12; Dr. Harvey Garner, Community School Superintendent CSD 18; Carlos Edwards, Community School Superintendent CSD 23, and Joseph Pacheco, Community School Superintendent CSD 32 supervised the overall development of the CIMS program within their respective districts.

Morris Freedman, Director of the Office of Curriculum Development and Support; Irwin Kaufman, Director of Technology, Assigned to the Chief Executive for Instruction; Gerald Elgarten, Director of Mathematics (Interim Acting); Marjorie McAllister, Director of Early Childhood Education; Kenneth Bates, Director of CIMS; Maria DeSalvio, Assistant Director of Mathematics; Arthur Flug and Doreen Genkin, Assistant Directors of CIMS and Gene Menchini, Assistant to the Director for Systems Planning and Coordination, ODPC provided overall supervision of the project.

DIVISION OF SPECIAL EDUCATION

Overall supervision of curriculum in addressing those students with special needs was coordinated by Edward M. Sermier, Chief Administrator, Division of Special Education.

Gloria Cole, Director of Office of Program Development; Lorelle Lawson, Administrator, Curriculum Development Unit of the Office of Program Development and Geraldine Silver and Susan Wieder, Special Education Coordinators provided guidance and support in addressing these special needs.

PRINCIPAL WRITERS

The principal writers responsible for planning the scope, sequence and engaging in the necessary research in revising of the modules were:

Sara Jane Bass, CIMS Curriculum Leader
Judith Fein, CIMS Curriculum Leader
Rochelle Watnick, CIMS Curriculum Leader

CIMS CURRICULUM DEVELOPERS

Michael Abraskin	CSD 18 J.H.S. 68K	Lenore M. Messina	CSD 32 Biling. Coord.
Seymour Bashkowitz	CSD 18 J.H.S. 211K	Selma Mitlitsky	CSD 18 Math Coord.
Bonnie Breslauer	CSD 18 P.S. 114K	Edythe Ogin	CSD 19 I.S. 171K
Bernice Buchalter	CSD 18 P.S. 233K	Joseph Porzio	CSD 19 Staff Dev.
Abraham Butensky	CSD 23 P.S. 165K	Rosalyn Resnick	CSD 18 P.S. 233K
Merle Glass	CSD 18 P.S. 219K	Barbara Rodgers	CSD 18 P.S. 233K
Sheldon Haas	CSD 12 I.S. 116X	Blanche Solomon	CSD 32 P.S. 299K
Jeffrey Joyce	CSD 15 I.S. 88K	Martin L. Spiro	CSD 19I.S. 302K
Felice Karmin	CSD 32 P.S. 299K	Diane Taros	CSD 32 P.75K
Mark Lehrer	CSD 12 I.S. 158K	Mary Ann Wasserman	CSD 1 P.S. 110M
Susan Margulies	H.S. Mathematics	Bernice Zuckerman	CSD 19 Staff Dev.

ILLUSTRATORS

Paula Blanes, CSD 15 P.S. 39K
Charles Flisser, CSD 11 P.S. 105X
Anita Woest, H.S. Fine Arts

EDITORS

Jack Cohen, Assistant Principal/Supervision, Mathematics,
Theodore Roosevelt High School
Laura Lederman, CSD 26 J.H.S. 158Q
Virginia Pero, CSD 18 J.H.S. 211K, Special Education
Fred Remer, CSD 6, Mathematics Director
Randolph Ross, Principal, Newtown High School

PRODUCTION

Alaire Mitchell, Unit Head, Curriculum Editorial Unit
Maureen Maguire, Production Coordinator, Curriculum Editorial Unit
Dorothy Johnson, Office Associate, CIMS

CIMS CURRICULUM DEVELOPERS

Michael Abraskin	CSD 18 J.H.S. 68K	Lenore M. Messina	CSD 32 Biling. Coord.
Seymour Bashkowitz	CSD 18 J.H.S. 211K	Selma Mitlitsky	CSD 18 Math Coord.
Bonnie Breslauer	CSD 18 P.S. 114K	Edythe Ogin	CSD 19 I.S. 171K
Bernice Buchalter	CSD 18 P.S. 233K	Joseph Porzio	CSD 19 Staff Dev.
Abraham Butensky	CSD 23 P.S. 165K	Rosalyn Resnick	CSD 18 P.S. 233K
Merle Glass	CSD 18 P.S. 219K	Barbara Rodgers	CSD 18 P.S. 233K
Sheldon Haas	CSD 12 I.S. 116X	Blanche Solomon	CSD 32 P.S. 299K
Jeffrey Joyce	CSD 15 I.S. 88K	Martin L. Spiro	CSD 191.S. 302K
Felice Karmin	CSD 32 P.S. 299K	Diane Taros	CSD 32 P.75K
Mark Lehrer	CSD 12 I.S. 158K	Mary Ann Wasserman	CSD 1 P.S. 110M
Susan Margulies	H.S. Mathematics	Bernice Zuckerman	CSD 19 Staff Dev.

ILLUSTRATORS

Paula Blanes, CSD 15 P.S. 39K

Charles Flisser, CSD 11 P.S. 105X

Anita Johnson, H.S. Fine Arts

EDITORS

Jack Cohen, Assistant Principal/Supervision, Mathematics,
Theodore Roosevelt High School

Laura Lederman, CSD 26 J.H.S. 158Q

Virginia Pero, CSD 18 J.H.S. 211K, Special Education

Fred Remer, CSD 6, Mathematics Director

Randolph Ross, Principal, Newtown High School

PRODUCTION

Alaire Mitchell, Unit Head, Curriculum Editorial Unit

Maureen Maguire, Production Coordinator, Curriculum Editorial Unit

Dorothy Johnson, Office Associate, CIMS

COMMUNITY SCHOOL DISTRICT 23

Wallace Dimson,	District Mathematics Coordinator
Gloria Allen	P.S. 327K
Marshall Belson	P.S. 183K
Abraham Butensky	P.S. 165K
Janice Ellenbogen	P.S. 298K
Ruth Fennell	P.S. 298K
Gladys H. Galamison	P.S. 156K
Bruce Landau	P.S. 327K
George McMullen	P.S. 183K
Carmella Murden	J.H.S 275K
Martha Hilinski-Pepe	P.S. 327K
Rochelle Sanders	P.S. 327K
Gary Wexler	P.S. 41K
Priscilla A. Williams	I.S. 271K
Frederick Zwibel	P.S. 184K

COMMUNITY SCHOOL DISTRICT 32

Aurora Larocca,	District Mathematics Coordinator
Pedro J. Colon	J.H.S. 111K
Dorothy A. Conroy	P.S. 116K
Joan Fox	P.S. 116K
Steven Ganzell	I.S. 291K
Akhtar A. Khan	I.S. 291K
Lenore Marie Messina	P.S. 151K
Joanne Narisi	P.S. 299K
George Silverglad	P.S. 274K
Norma Warmund	P.S. 45K
Stephen Elliot Weiss	P.S. 274K
Martin Weissman	P.S. 384K

CITYWIDE CURRICULUM DEVELOPERS

Judy Z. Cohen	Corr. Math. N.P.S.	Carmen B. Matthews	CSD 3 J.H.S. 88M
Nancy R. Coleman	CSD 19 Staff Dev.	Edythe Ogin	CSD 19 I.S. 171K
Carl Conetta	Special Ed. Bronx	Joseph A. Porzio	CSD 19 Staff Dev.
Gerri T. Dunne	Corr. Math. N.P.S.	Fred Remer	CSD 6 Math Coord.
Meryl Glass	CSD 22 P.S. 139K	Jon Rothfeld	CSD 19 Staff Dev.
David A. Gold	CSD 19 Staff Dev.	Marvin Schneider	Edward R. Murrow H.S.
Stuart Goldberg	CSD 19 Staff Dev.	Leila Schwartz	Corr. Math. N.P.S.
Michelle Greenberg	CSD 28 P.S. 160Q	Angelina Spero	Corr. Math. N.P.S.
Joyce Jalowski	Corr. Math. N.P.S.	Martin L. Spiro	CSD 19 I.S. 302
Margaret Jordan	Corr. Math. N.P.S.	Bernice Staub	Corr. Math. N.P.S.
Jeffrey Joyce	CSD 15 I.S. 88K	Madeline Sussman	CSD 1 P.S. 142M
Nicholas C. Leo	Corr. Math. N.P.S.	Robert B. Weiss	CSD 28 J.H.S. 190Q
Elaine J. Kaplan	CSD 28 J.H.S. 157Q	Bernice Zuckerman	CSD 19 Staff Dev.
Joan Mahon	CSD 19 Staff Dev.		

CITYWIDE CURRICULUM ILLUSTRATORS

Joyce Abramowitz	CSD 26 J.H.S. 158Q	Edward Kissane	Beach Channel H.S.
Amy Appleman	CSD 22 P.S. 194K	Susan M. Seidler	Corr. Math. N.P.S.
Paula J. Blanes	CSD 15 P.S. 39K	Dolores Soldo	Special Ed. Brooklyn
Nina Cucchiari	Special Ed. Bronx	Sandy Susser	Special Ed. Bronx
Charles B. Flisser	Special Ed. Bronx		

CITYWIDE CURRICULUM EDITORS

Meryl Fenster	CSD 30 P.S. 171K	Laura J. Lederman	CSD 26 J.H.S. 158Q
Robert Greenman	James Madison H.S.	Mary Newsom-King	CSD 8 J.H.S. 101X
Stephanie Lang-Goldsmith	Special Ed. Queens	Lorraine Wittman	CSD 25 P.S. 169Q

PRODUCTION STAFF

Anne Cohen, Education Analyst
Dorothy Johnson, Office Associate

To The Teacher:

The activities in the CIMS student workbook are designed to provide the pupils with practice in mastering the curriculum's performance objectives and follows the sequence of the CIMS teacher's manual. Each workbook activity page lists the corresponding performance objective number in the upper left hand corner. The activity page numbers are identical to those found in the CIMS teacher's manual.

To The Student:

This mathematics workbook will help you to practice many of the new ideas your teachers have presented. Each worksheet has examples of the material you have studied in your daily mathematics lesson. As you proceed through this workbook, you will notice that you have learned many skills and will be ready to move on to more difficult ones.

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
4.02.02.01	Add two or more 5-digit numbers and check.....	49a
4.02.02.02	Solve word problems related to skills learned in this module.....	49b
4.03.02.01 &.03	Subtract a 2, 3, 4-, and 5-digit number from a 5-digit number and check; solve word problems related to skills learned in this module.....	50a
4.03.02.02 -.03	Subtract a 2-, 3-, 4-, and 5-digit number from 10,000 and multiples of 10,000 and check; solve word problems related to skills learned in this module.....	50b
4.03.02.03	Solve word problems related to skills learned in this module.....	50c
Units 37, 38,	**SHARPENING YOUR SKILLS.....**	**50d**
4.06.05.01 -.02	Identify and define improper fractions and mixed numbers; change an improper fraction to a mixed number or a whole number.....	51a
4.06.05.03	Change a mixed number or a whole number to an improper fraction.....	51b
4.06.06.01 -.02	Add mixed numbers with common denominators; subtract mixed numbers with common denominators.....	52a
4.06.06.03	Solve word problems related to skills learned in this module.....	52b
4.10.03.01	Identify and compare the number of ounces in a cup, a pint, and a quart.....	53a
4.10.03.02	Identify the relationships among cups, pints, quarts, and gallons.....	53b
Units 39, 40, 41	**SHARPENING YOUR SKILLS.....**	**53c**
4.09.05.01 -.02	Define a parallelogram as a quadrilateral in which the opposite sides are parallel; define a square and a rectangle as parallelograms.....	54a

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
4.10.04.01 -.02	Identify perimeter as the total distance around the sides of an object or space; find the perimeter of a rectangle.....	55a
4.10.04.03	Develop and use a formula for finding the perimeter of a rectangle.....	55b
4.05.04.01	Identify the distributive property of division over addition or subtraction and express the remainder as a fraction.....	56a
4.05.04.02	Divide a 2- or 3-digit number by a 1-digit divisor without regrouping using the distributive property of division over addition.....	56b
Units 42, 43 44	**SHARPENING YOUR SKILLS**.....	**56c**
4.04.03.01 -.02	Round values to the nearest dollar to estimate products; multiply values to $.99 by a 1-digit multiplier.....	57a
4.04.03.01 &.03	Round values to the nearest dollar to estimate products; multiply values to $9.99 by a 1-digit multiplier.....	57b
4.04.03.04	Solve word problems related to skills learned in this module.....	57c
4.05.05.01 &.04	Round to the nearest dollar to estimate quotients; solve word problems related to skills learned in this module.....	59a
4.05.05.02 &.04	Divide values to $.99 by a 1-digit divisor and check; solve word problems related to skills learned in this module.....	59b
4.05.05.03 -.04	Divide values to $9.99 by a 1-digit divisor and check.....	59c
4.01.06.01 -.02	Identify the Roman symbols I, V, and X and use them to write Roman numerals from I through XXXIX (1 through 39); identify the Roman numerals L and C and use them, with I, V, and X, to write Roman numerals from XL through C (40 through 100).....	60a
4.01.06.03	Rename a Roman numeral as its Arabic equivalent.....	60b

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
4.01.06.04	Identify and write Roman numerals from CI through CCCXCIX (101 through 399).....	60c
Units 45, 46, 47	**SHARPENING YOUR SKILLS**.....	**60d**
4.10.05.01 -.02	Define circumference as the distance around a circle; find the relationship between diameter and circumference.....	61a
4.10.05.03	Find the relationship between radius and circumference.....	61b
4.02.03.01 -.02	Use the associative property of addition; solve word problems related to skills learned in this module.....	62a
4.02.04.01 &.03	Add two or more 5-digit numbers and check; solve word problems related to skills learned in this module.....	63a
4.02.04.02 -.03	Add two or more 6-digit numbers and check; solve word problems related to skills learned in this module.....	63b
Units 48, 49, 50	**SHARPENING YOUR SKILLS**.....	**63c**
4.03.03.01 -.02	Subtract a 2-, 3-, 4-, 5-, or 6-digit number from a 5- or 6-digit number and check; subtract a 2-, 3-, 4-, 5-, or 6-digit number from 10,000 and its multiples and 100,000 and its multiples and check...	64a
4.03.03.03	Solve word problems related to skills learned in this module.....	64b
4.04.04.01	Multiply 1,000 and 10,000, and multiples of 1,000 and 10,000, by a 1-digit number.....	65a
4.04.04.02 &.04	Multiply 4-digit numbers by a 1-digit number without regrouping (exchange); solve word problems related to skills learned in this module.....	65b
4.04.04.03 -.04	Multiply 4-digit numbers by a 1-digit number with regrouping (exchange); solve word problems related to skills learned in this module.....	65c

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
Units 51, 52	**SHARPENING YOUR SKILLS**	**65d**
4.05.06.01 -.02	Divide a number through 9,999 by a 1-digit divisor and check using multiplication; solve word problems related to skills learned in this module	66a
4.10.06.01	Read and locate the degrees for the freezing point of water (32°F), the boiling point of water (212°F), and normal body temperature (98.6°F) on a Fahrenheit thermometer	67a
4.10.06.02	Read and locate the degrees for the freezing point of water (0°C), the boiling point of water (100°C), and normal body temperature (37°C) on a Celsius thermometer	67b
4.08.01.01 -.02	Identify a positive number as a number which appears to the right of zero on a number line; identify a negative number as a number which appears to the left of zero on a number line	68a
4.08.01.03 -.04	Identify situations when negative and positive numbers may be used; solve word problems related to skills learned in this module	68b
Units 53, 54, 55	**SHARPENING YOUR SKILLS**	**68c**
4.12.04.01	Identify all the possible arrangements for a group of objects	69a
4.12.04.02	Solve word problems related to skills learned in this module	69b
4.13.04.01	Locate patterns on a calendar	70a
4.13.04.02	Locate patterns on a chart/table	70b
4.06.07.01 -.02	Find the common factors of two or more whole numbers less than 100; find the greatest common factor of a set of whole numbers	71a
4.06.07.03 -.04	Find the common multiples of two or more whole numbers less than 100; find the least common multiple of a set of whole numbers	71b

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
Units 56, 57, 58	**SHARPENING YOUR SKILLS**	71c
4.10.07.01	Define and measure the area of a rectangle by finding the number of square units contained in the rectangle	72a
4.10.07.02	Develop and use a formula to find the area of a rectangle	72b
4.10.08.01 -.02	Define and measure the volume of a rectangular prism (block) as the number of cubic units contained in the block; develop and use a formula to find the volume of a rectangular prism (block)	73a
4.07.03.01 -.02	Add decimals to hundredths; subtract decimals to hundredths	74a
4.07.03.03	Solve word problems related to skills learned in this module	74b
Units 59, 60, 61	**SHARPENING YOUR SKILLS**	**74c**
4.07.04.01	Multiply decimals to tenths with products to hundredths	75a
4.07.04.02	Divide decimals with dividends to tenths by whole number divisors	75b
4.07.04.03	Solve word problems related to skills learned in this module	75c
4.01.07.01	Find patterns in a sequence of numbers and complete the sequence	76a
4.01.07.02	Find patterns for square numbers	76b
4.01.07.03	Find patterns for triangular numbers	76c
4.01.08.01	Identify place value through millions	78a
4.01.08.02	Identify place value through hundred millions	78b

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
4.01.08.03 -.04	Identify and write 7-, 8-, and 9-digit numbers in expanded form; identify and write 7-, 8-, and 9-digit numbers in standard form when given the expanded form	78c
4.01.08.05	Translate a verbal phrase into a numeral and a numeral into a verbal phrase	78d
Units 62, 63, 64	**SHARPENING YOUR SKILLS**	**78e**
4.06.08.01	Find equivalent fractions with a common denominator	79a
4.06.08.02 -.03	Add fractions having unlike denominators; subtract fractions having unlike denominators	79b
4.06.08.04	Solve word problems related to skills learned in this module	79c
4.04.05.01	Multiply 10, and multiples of 10, by 10 and multiples of 10	80a
4.04.05.02	Multiply any 2-digit number by 10 and multiples of 10	80b
4.04.05.03 &.05	Multiply a 2-digit number by a 2-digit number without regrouping (exchange); solve word problems related to skills learned in this module	80c
4.04.05.04 -.05	Multiply a 2-digit number by a 2-digit number with regrouping (exchange); solve word problems related to skills learned in this module	80d
Units 65, 66	**SHARPENING YOUR SKILLS**	**80e**
4.04.06.01 &.04	Multiply 100, and multiples of 100, by 10 and multiples of 10; solve word problems related to skills learned in this module	81a
4.04.06.02 &.04	Multiply any 3-digit number by 10 and multiples of 10; solve word problems related to skills learned in this module	81b
4.04.06.03 -.04	Multiply a 3-digit number by a 2-digit number; solve word problems related to skills learned in this module	81c

TABLE OF CONTENTS
LEVEL 4

P.O. NUMBER	PERFORMANCE OBJECTIVE DESCRIPTION	PAGE NUMBER
4.05.07.01 &.03	Divide a 2-digit dividend by 10 or a multiple of 10 and check; solve word problems related to skills learned in this module	82a
4.05.07.02 -.03	Divide a 3-digit dividend by 10 or multiples of 10 and check; solve word problems related to skills learned in this module	82b
4.05.08.01 &.03	Divide a 2-digit dividend by a 2-digit divisor and check; solve word problems related to skills learned in this module	83a
4.05.08.02 -.03	Divide a 3-digit dividend by a 2-digit divisor and check; solve word problems related to skills learned in this module	83b
Units 67, 68, 69	**SHARPENING YOUR SKILLS**	**83c**
4.09.06.01	Recognize lines of symmetry in geometric shapes	84a
4.09.06.02	Recognize lines of symmetry in objects other than geometric shapes	84b
4.09.07.01	Locate positive and negative coordinates on a grid	85a
4.09.07.02	Use line segments to connect points	85b
4.09.08.01	Construct geometric figures using straight-edge rulers, protractors, and compasses	86a
4.06.09.01	Write a ratio to represent a relationship between two quantities	87a
4.06.09.02	Solve word problems related to skills learned in this module	87b
Units 70, 71, 72, 73	**SHARPENING YOUR SKILLS**	**87c**

P.O. 4.02.02.01

NAME: _____ CLASS: _____ DATE: _____

Add and check. Find each answer in the code boxes and write the code letter above the example letter at the bottom of the page to solve the riddle.

If 10 dragons are a clan and 20 dragons are a herd, what are 30 and 40?

Code

76,921	94,406	35,813	127,703	$889.21	$780.22
E	N	S	T	V	Y

① 12,345 + 23,468

② 60,132 + 16,789

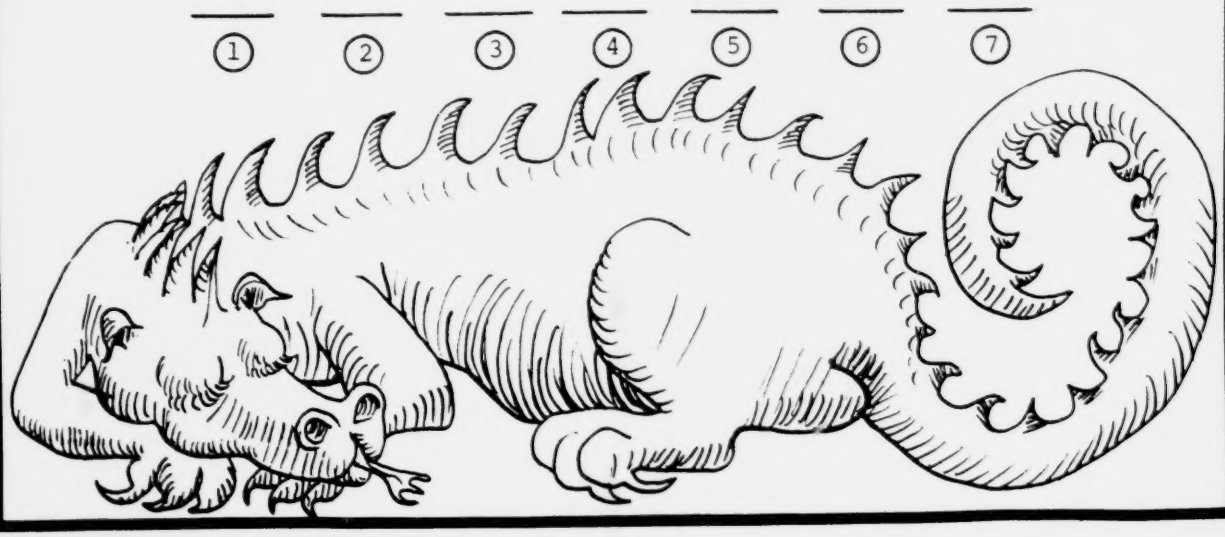
③ $333.98 + 555.23

④ 28,450 + 48,471

⑤ 35,425 + 46,619 + 12,362

⑥ 73,628 + 54,075

⑦ $428.56 + 246.98 + 104.68



P.O. 4.02.02.02

NAME: _____ CLASS: _____ DATE: _____

Solve each problem and check.

1. Our school district had three deliveries of pencils last year. 15,238 pencils were delivered in January, 22,465 in May and 18,562 in September. How many pencils were delivered last year? _____pencils	**solve**	**check**
2. Mr. and Mrs. Smith bought new furniture for their apartment. They bought a bookcase for $117.50, a dining table for $385.50, and a couch for $399.99. How much did they spend in all? _____	**solve**	**check**
3. There were 11,281 spectators at the baseball game on Friday, 16,060 spectators on Saturday, and 10,420 spectators on Sunday. How many spectators were there during the 3 days? _____spectators	**solve**	**check**
4. On one day 42,516 people visited Disney World in Orlando, Florida. On another day, 39,246 people visited Disney World. How many people visited during the 2 days? _____people	**solve**	**check**

Do you remember?

Max placed 3 red blocks, 4 blue blocks, and 1 green block in a bag. If he picks a block out of the bag without looking, what is the probability that he will pick a red block?
The probablity of picking a red block is _____.

P.O. 4.03.02.01 & .03

NAME: _____ CLASS: _____ DATE: _____

Solve and check.

① 73,109 − 56,107 = 17,002 **check**	② 94,949 − 12,843 **check**
③ 47,796 − 28,615 **check**	④ 89,242 − 68,100 **check**
⑤ 94,949 − 5,843 **check**	⑥ 78,343 − 69,211 **check**
⑦ 82,727 − 14,555 **check**	⑧ 77,284 − 148 **check**
⑨ 98,343 − 74,211 **check**	⑩ 79,353 − 58,211 **check**

⑪ After the Girl Scout cookie sale, Troop 207 had $532.90 and Troop 142 had $629.45. How much more money did Troop 142 have than Troop 207 after the cookie sale?

_____

P.O. 4.03.02.02-.03

NAME: _____ CLASS: _____ DATE: _____

Solve and check.

① **solve** **check** 80,000 - 1,383	② **solve** **check** 90,000 - 9,383
③ **solve** **check** 10,000 - 754	④ **solve** **check** 20,000 - 4,084
⑤ **solve** **check** 30,000 - 9,995	⑥ **solve** **check** 50,000 -17,681
⑦ **solve** **check** $400.00 - 36.88	⑧ **solve** **check** $700.00 -148.75

⑨ Ms. Dalton had $600.00 in the bank. She took $128.85 out of the bank to buy a new set of dishes. How much money does she have left in the bank?

_____ left in the bank

P.O. 4.03.02.03

NAME: _____ CLASS: _____ DATE: _____

Solve each problem and check.

1. A police force has 18,630 members. If 3,557 are women, how many members of the police force are men? _____ members	solve	check
2. The letter carriers in a local Post Office delivered 24,275 letters during the first week of November. During the second week, they delivered 20,684 letters. How many more letters did they deliver during the first week than the second week? _____ letters	solve	check
3. In 1984, there were 45,291 teachers in a large city. In 1985, that city had 51,384 teachers. How many more teachers were there in 1985 than in 1984? _____ teachers	solve	check
4. A fire department had 28,807 fire fighters. How many fire fighters will they have if that amount decreases by 1,489? _____ fire fighters	solve	check

Do you remember?

Complete each pair of equivalent fractions.

$\frac{1}{5} = \frac{3}{\square}$ $\frac{1}{2} = \frac{\square}{8}$ $\frac{3}{4} = \frac{9}{\square}$

SHARPENING YOUR SKILLS

Units 37, 38

Name: _____ **Class:** _____ **Date:** _____

1. What digit belongs in the box?

$$\begin{array}{r} 27,374 \\ +\ 61,\square 78 \\ \hline 88,552 \end{array}$$

(a) 2
(b) 8
(c) 1
(d) Not Here

2. $87,324 - 56,832$

(e) 144,156
(f) 31,523
(g) 30,492
(h) Not Here

3. Solve.

$$\begin{array}{r} 17,195 \\ +26,836 \end{array}$$

4. The Sports Arena holds 18,367 people. If the Sports Arena is filled on Saturday night and Sunday, what will the attendance be for the 2 days?

_____ people

5. Solve and check.

$$\begin{array}{r} 75,825 \\ -36,544 \end{array}$$

6. $\$257.34 + \$128.35 + \$268.89 = \square$

(a) $653.58
(b) $654.58
(c) $654.48
(d) Not Here

7. $75,817 - 36,389 = \square$

(e) 39,428
(f) 39,488
(g) 112,206
(h) Not Here

8. The coat Mr. Carlton wanted to buy cost $129.00. The clerk told him the coat was on sale for $35.99 less than the original price. What was the reduced price of the coat?

The reduced price was _____.

P.O. 4.06.05.01-.02

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

1. Place a ring around all the improper fractions.
   Place a box around all the mixed numbers.

$\frac{8}{5}$ 3 $7\frac{1}{2}$ $\frac{4}{4}$ $\frac{9}{3}$ $6\frac{1}{2}$ 5

$\frac{4}{3}$ 2 $3\frac{1}{5}$ $\frac{7}{3}$ $\frac{9}{10}$ $5\frac{1}{3}$

2. Name each shaded amount as an improper fraction.

A. = $\frac{5}{2}$

B. = _____

C. = _____

3. Rename each improper fraction as a mixed number.

A. $\frac{4}{3}$ = $1\frac{1}{3}$ D. $\frac{13}{6}$ = _____

B. $\frac{8}{5}$ = _____ E. $\frac{9}{4}$ = _____

C. $\frac{11}{2}$ = _____ F. $\frac{7}{2}$ = _____

P.O. 4.06.05.03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

1. Name each shaded amount as a mixed number or a whole number and as an improper fraction.

A. = $1\frac{2}{5}$ or $\frac{7}{5}$

B. = _____ or _____

C. = _____ or _____

2. Rename each mixed number as an improper fraction.

A. $2\frac{1}{3} = \frac{7}{3}$

B. $4\frac{1}{2} =$ _____

C. $3\frac{1}{4} =$ _____

D. $6\frac{1}{3} =$ _____

E. $4\frac{1}{3} =$ _____

F. $1\frac{1}{10} =$ _____

G. $2\frac{3}{5} =$ _____

H. $5\frac{1}{4} =$ _____

Do you remember?

The Burger Barn sold 25 chocolate shakes on Monday, 33 chocolate shakes on Tuesday, and 38 chocolate shakes on Wednesday. Find the average number of chocolate shakes sold each day.

_____ chocolate shakes

Solve

P.O. 4.06.06.01-.02

NAME: _____ CLASS: _____ DATE: _____

Complete each example. Use the code to discover the secret message.

① $3\frac{1}{5} + 2\frac{1}{5}$

② $3\frac{4}{6} - 2\frac{2}{6}$

③ $9\frac{3}{4} - 1\frac{1}{4}$

④ $10\frac{5}{6} - 9\frac{3}{6}$

⑤ $5\frac{1}{8} + 2\frac{3}{8}$

⑥ $7\frac{3}{3} - 4\frac{1}{3}$

⑦ $2\frac{2}{5} + 4\frac{1}{5}$

⑧ $8\frac{8}{9} - 6\frac{4}{9}$

⑨ $1\frac{1}{3} + 2\frac{1}{3}$

⑩ $3\frac{1}{4} + 5\frac{1}{4}$

⑪ $8\frac{9}{10} - 4\frac{1}{10}$

⑫ $1\frac{3}{9} + 1\frac{1}{9}$

⑬ $3\frac{4}{12} + 4\frac{6}{12}$

⑭ $9\frac{6}{7} - 2\frac{1}{7}$

1	2	3	4	5	6	7	8	9	10	11	12	13	14

$7\frac{4}{8}$	$8\frac{2}{4}$	$4\frac{8}{10}$	$6\frac{3}{5}$	$3\frac{2}{3}$	$7\frac{5}{7}$	$5\frac{2}{5}$	$7\frac{10}{12}$	$2\frac{4}{9}$	$1\frac{2}{6}$
U	Y	B	V	R	T	D	S	E	O

P.O. 4.06.06.03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Use the chart to solve each problem below.

Time Spent at Sports

Name	Sport	Hours Spent
Ron	Baseball	$3\frac{1}{6}$ hours
Jack	Soccer	$6\frac{5}{6}$ hours
Mel	Football	$2\frac{3}{6}$ hours
Laura	Basketball	$4\frac{1}{6}$ hours
Jean	Handball	$5\frac{2}{6}$ hours

1. How many hours did Laura and Ron spend playing ball?

   _____ hours

2. How many more hours did Jack play ball than Mel?

   _____ hours

3. How many hours did both Jean and Laura play ball?

   _____ hours

4. What is the difference between the time Jack played and the time Jean played?

   _____ hours

5. How much more time did Jean spend playing ball than Ron did?

   _____ hours

B. Solve each story problem.

1. Cindy walked $4\frac{3}{5}$ miles on Monday. She walked only $1\frac{1}{5}$ miles on Tuesday. How many more miles did she walk on Monday?

   _____ miles

2. Mother bought $7\frac{5}{8}$ yards of material for my dress. She bought $4\frac{2}{8}$ yards of material for my sister's dress. How much material did she buy in all?

   _____ yards

P.O. 4.10.03.01

NAME: _____ CLASS: _____ DATE: _____

Complete the table and use it to answer the problems below.

1 cup	=	_____ ounces
1 pint	=	_____ ounces
1 quart	=	_____ ounces

1. Jane's mother used 5 cups of water to make lemonade. How many ounces of water did she use?

_____ oz.

2. If a bottle contains 1 pint and 8 ounces of juice, how many ounces does it contain?

_____ oz.

3. How many ounces are in 1 quart and 1 pint of milk in all?

_____ oz.

4. Cindy needs to measure 3 pints of fruit juice. Her measuring cup only measures ounces. How many ounces does Cindy need to measure?

_____ oz.

5. How many ounces are in 2 quarts of milk?

_____ oz.

6. Mr. Belsen bought 1 quart and 4 ounces of soda. How many ounces of soda did he buy?

_____ oz.

Do you remember?

Rewrite each group of decimals in order from least to greatest.

a. 2.7, 1.5, 2.9 _____ , _____ , _____

b. 4.6, 4.9, 4.7 _____ , _____ , _____

c. 5.21, 5.39, 5.1 _____ , _____ , _____

P.O. 4.10.03.02

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

1. Complete the chart.

Gallons	1	2		4	
Quarts	4		12		20

2. Complete the chart.

Cups	2				10
Pints	1	2	3	4	

3. Write the missing numbers.

4 c. = ____ pt.

8 c. = ____ qt.

8 c. = ____ pt.

6 pt. = ____ qt.

2 gal. = ____ qt.

4 gal. = ____ qt.

2 qt. = ____ c.

6 pt. = ____ c.

4. Bobby watered his plants with 2 gallons of water. He only had a pint container. How many times did he fill it?

2 gallons = ____ pints

He filled the container ____ times.

5. Maggie has 3 quarts of milk. How many one cup containers can she fill?

She can fill ____ one cup containers.

CHALLENGE!

3 quarts + 3 pints + 3 cups = _____ ounces

SHARPENING YOUR SKILLS

Units 39, 40, 41

Name: _____ **Class:** _____ **Date:** _____

1. $\frac{11}{5} = \square$

   (a) $11\frac{1}{5}$ (c) $2\frac{1}{5}$

   (b) $2\frac{1}{2}$ (d) Not Here

2. $\frac{7}{3} = \square$

   (e) $2\frac{1}{3}$ (g) $2\frac{3}{7}$

   (f) $7\frac{1}{3}$ (h) Not Here

3. $4\frac{1}{2} = \square$

   (a) $\frac{9}{4}$ (c) $\frac{4}{2}$

   (b) $\frac{9}{2}$ (d) Not Here

4. $3\frac{4}{5} = \square$

   (e) $\frac{15}{5}$ (g) $\frac{12}{5}$

   (f) $\frac{19}{4}$ (h) Not Here

5. Add.

$$\begin{array}{r} 2\frac{3}{5} \\ +4\frac{1}{5} \\ \hline \end{array}$$

6. Find the sum.

$$\begin{array}{r} 3\frac{1}{8} \\ +6\frac{5}{8} \\ \hline \end{array}$$

7. Find the difference.

$$\begin{array}{r} 5\frac{7}{8} \\ -3\frac{2}{8} \\ \hline \end{array}$$

8. Joan's recipe for cookies called for $2\frac{3}{4}$ cups of sugar. Philip's recipe needed $1\frac{2}{4}$ cups of sugar . How much more sugar did Joan's recipe need than Philip's?

   (a) $1\frac{2}{4}$ cups (c) 1 cup

   (b) $1\frac{1}{4}$ cups (d) Not Here

9. Complete the chart.

   1 cup = _____ ounces

   1 pint = _____ cups

   1 quart = _____ pints

   1 gallon = _____ quarts

10.

1 quart

1 pint

How many ounces of milk are there in all?

_____ ounces

P.O. 4.09.05.01-.02

NAME: _____ CLASS: _____ DATE: _____

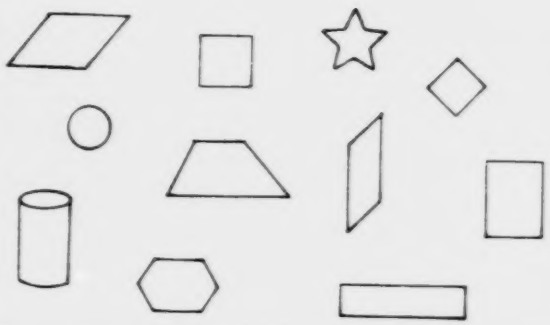
Follow the directions below.

Complete the sentence below.

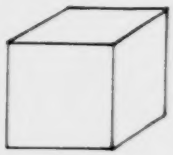
A parallelogram is a quadrilateral whose _____ sides are _____.

1. Connect 4 dots to make a parallelogram.

2. Circle the parallelograms.



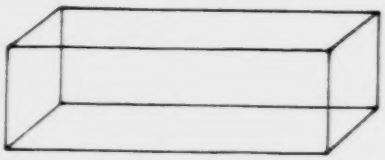
3.



How many parallelograms can you see? _____

How many are hidden? _____

4.



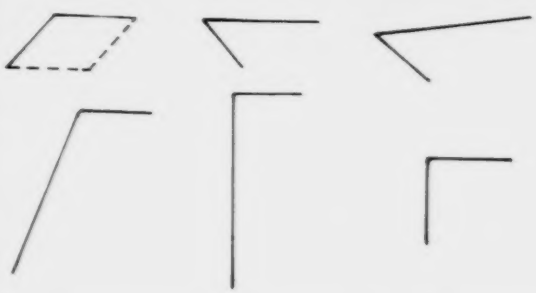
How many parallelograms can you find?

_____

5. Circle the objects shaped like a parallelogram.

the sun	a lobster
a door	a picture frame
a lemon	a desk top
a box top	a bridge

6. Make each picture below into a parallelogram.



P.O. 4.10.04.01-.02

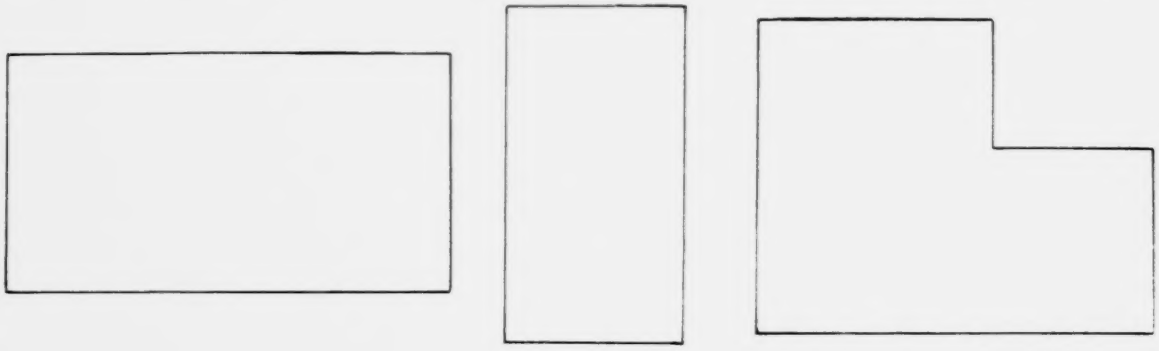
NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

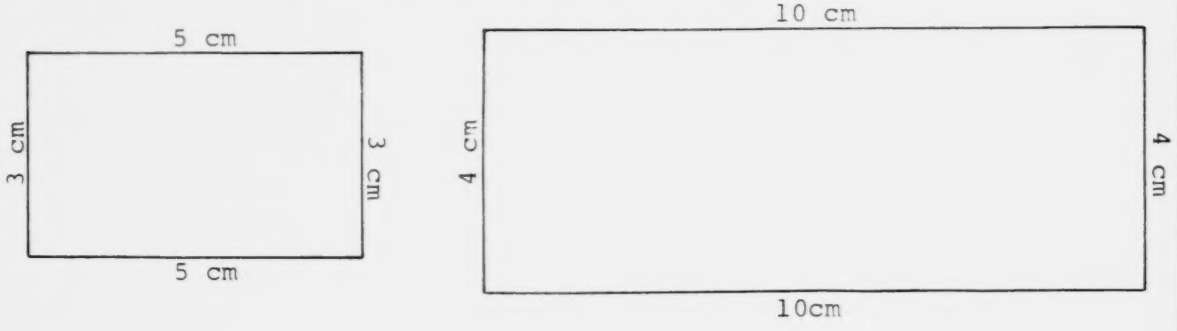
A. Draw a ring around the correct word to complete each sentence.

1. You can find the perimeter of a figure by [adding multiplying] the lengths of all the sides.
2. The distance around a figure is its [centimeters perimeter].

B. Use a crayon to trace the perimeter of each figure.



C. Find the perimeter of each rectangle.



Perimeter = 5+3+5+3=16cm Perimeter = _____

D. Use a ruler to find the perimeter of this page.

_____

P.O. 4.10.04.03

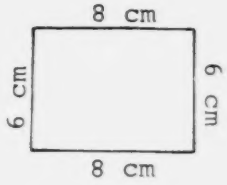
NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

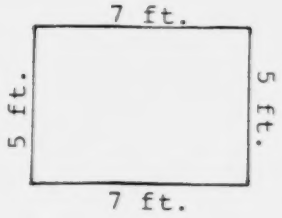
A. Write the formula used to find the perimeter of a rectangle.

Perimeter = _____

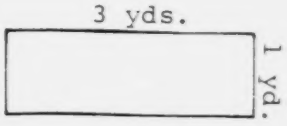
B. Use the formula to find the perimeter of each rectangle below.



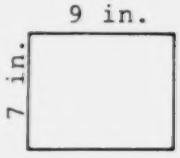
Perimeter = _____



Perimeter = _____

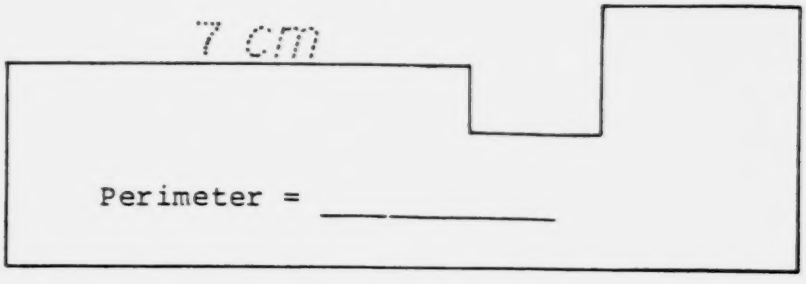


Perimeter = _____



Perimeter = _____

CHALLENGE! Use a ruler to find the perimeter of the polygon below.



Perimeter = _____

P.O. 4.05.04.01

NAME: _____ CLASS: _____ DATE: _____

Complete each division sentence by writing the missing digit in the empty boxes.

A. $38 \div 4 = \frac{38}{4} = \frac{36 + \square}{4} = \frac{36}{\square} + \frac{2}{\square} = 9 + \frac{2}{4} = \square$

B. $38 \div 4 = \frac{38}{4} = \frac{40 - 2}{\square} = \frac{\square}{4} - \frac{2}{4} = 10 - \frac{2}{4} = 9\frac{2}{4}$

C. $28 \div 3 = \frac{28}{3} = \frac{27 + \square}{\square} = \frac{27}{3} + \frac{\square}{3} = 9 + \frac{1}{3} = \square$

D. $28 \div 3 = \frac{28}{3} = \frac{30 - \square}{3} = \frac{30}{\square} - \frac{\square}{3} = 10 - \frac{\square}{3} = 9\frac{1}{3}$

In example A, 38 is being divided into [ ] equal groups. The answer shows that each of the four groups has [ ] and that 2 is a remainder.

In example C, 28 is being divided into [ ] groups. The answer shows that each of the [ ] groups has [ ] and that [ ] is a remainder.

CHALLENGE! Can you use the digits 2, 3, 5, and 7, once in each box, so the product will be 3,661?

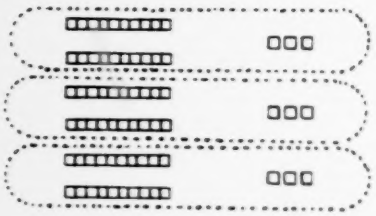
$$\square\,\square\,\square \times \square = 3{,}661$$

P.O. 4.05.04.02

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Separate the squared material into 3 equal groups.

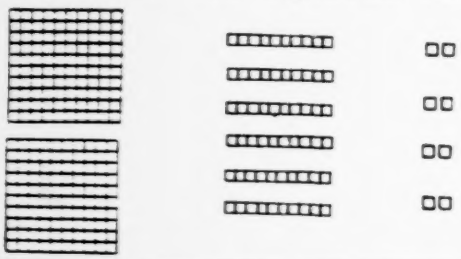


$3 \overline{)\ 6 \text{ tens} + 9 \text{ ones}} = 2 \text{ tens} + 3 \text{ ones} = 23$

B. Separate the squared material into 2 equal groups.

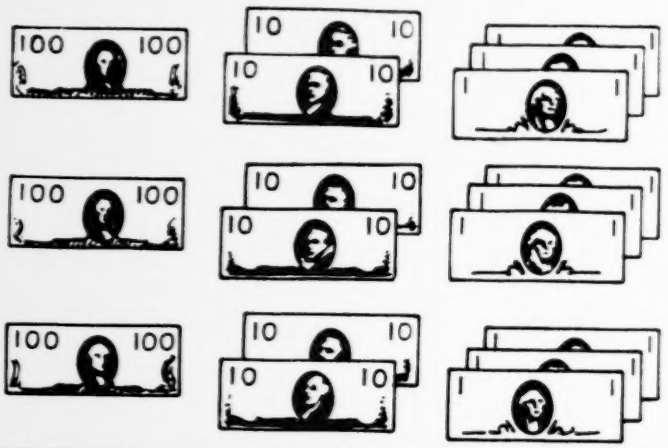
$2 \overline{)\ 4 \text{ tens} + 6 \text{ ones}} = ___$

C. Separate the squared material into 2 equal groups.



$\overline{)\ \ } = ___$

D. Divide the money equally among the three people.



$\overline{)\ \ } = ___$

120

SHARPENING YOUR SKILLS

Units 42, 43, 44

Name: _____ **Class:** _____ **Date:** _____

1. I am a quadrilateral. My opposite sides are equal and parallel. None of my angles is a right angle.

   What am I?

   (a) a rectangle
   (b) a square
   (c) a parallelogram
   (d) Not Here

2. Name two more parallelograms in your classroom.

   window pane _____

   _____

   _____

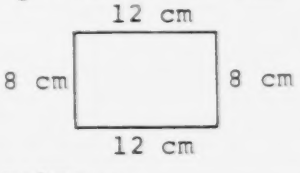
3. Write the correct words in the blanks to complete the paragraph.

   A quadrilateral is any plane closed figure with four straight sides and _____ angles. A quadrilateral in which both pairs of opposite sides are _____ is a parallelogram. A parallelogram with four right angles and sides which are equal is a _____.

4. When you add the total distance around the sides of an object or space, you are measuring its _____.

   (e) area (g) radius
   (f) diameter (h) perimeter

5. Find the perimeter of the rectangle.



   Perimeter = _____

6. Which of the following demonstrates the distributive property of division over addition?

   (a)

8 x 3 = 24	24 ÷ 3 = 8
3 x 8 = 24	24 ÷ 8 = 3

   (b) 7 x 2 = 2 x 7

   (c) $48 \div 5 = \frac{48}{5} = \frac{45+3}{5} = \frac{45}{5} + \frac{3}{5} = 9 + \frac{3}{5} = 9\frac{3}{5}$

   (d) Not Here

7. Divide.

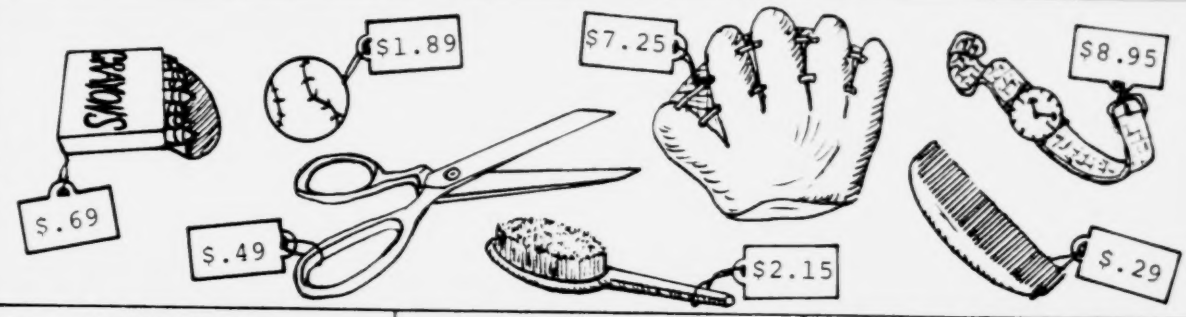
   4)4 tens + 8 ones = _____

   2)8 hundreds + 4 tens + 2 ones = _____

P.O. 4.04.03.01-.02

NAME: _____ CLASS: _____ DATE: _____

Look at the cost of each item. Follow the directions on each pad.



① Find the estimated cost of 6 balls.

$1.89 rounds to $2.00

x 6

$12.00

Estimated Cost

② Find the estimated cost of 2 watches.

Estimated Cost

③ Find the estimated cost of 3 gloves.

Estimated Cost

④ Find the exact cost of 5 combs.

$.29
x 5

Exact Cost

⑤ Find the exact cost of 3 boxes of crayons.

Exact Cost

⑥ Find the exact cost of 6 pairs of scissors.

Exact Cost

Do you remember?

Change each improper fraction to a mixed number.

$\frac{5}{4} =$ ☐ $\frac{6}{5} =$ ☐ $\frac{8}{3} =$ ☐ $\frac{9}{4} =$ ☐

P.O. 4.04.03.01 & .03

NAME: _____ CLASS: _____ DATE: _____

Estimate each product. Then find the exact product.

$6.20 x 3	rounds to	$6.00 x 3 = $18.00	estimated product	$6.20 x 3 = 18.60	actual product
$7.99 x 5	rounds to	☐ x 5	estimated product	$7.99 x 5	actual product
$9.12 x 4	rounds to	☐ x 4	estimated product	$9.12 x 4	actual product
$8.05 x 7	rounds to	☐ x 7	estimated product	$8.05 x 7	actual product
$5.95 x 6	rounds to	☐ x 6	estimated product	$5.95 x 6	actual product
$2.81 x 9	rounds to	☐ x 9	estimated product	$2.81 x 9	actual product

P.O. 4.04.03.04

NAME: _____ CLASS: _____ DATE: _____

Estimate the answer to each problem and then find the exact answer.

1. Ricky's scout troop saved $7.95 weekly for their annual holiday picnic.

   a. How much did they save after 4 weeks?

   estimate solve

   They saved _____.

   b. How much did they save after 8 weeks?

   estimate solve

   They saved _____.

   c. How much did they save after 9 weeks?

   estimate solve

   They saved _____.

2. Ricky and his friends went to the bakery to buy cakes for the picnic. They saw this price list for cakes.

PRICE LIST FOR CAKES
COCONUT CAKE $2.10
CHOCOLATE CAKE.....$3.50
RAISIN CAKE.....$1.95

   a. How much did they spend for 3 coconut cakes?

   estimate solve

   _____

   b. How much did they spend for 7 raisin cakes?

   estimate solve

   _____

CHALLENGE! Find the missing digits.

$254.32	16,2□□	49,8□3
- 48.□4	- 525	-22,97□
$□0□.88	□□,766	□□,831

P.O. 4.05.05.01 & .04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Round each amount to the nearest dollar.

$8.93 rounded to the nearest dollar is _____.

$5.49 rounded to the nearest dollar is _____.

$1.62 rounded to the nearest dollar is _____.

$9.19 rounded to the nearest dollar is _____.

$6.76 rounded to the nearest dollar is _____.

$8.50 rounded to the nearest dollar is _____.

$4.02 rounded to the nearest dollar is _____.

$ .98 rounded to the nearest dollar is _____.

B. Estimate each quotient.

① estimate

$3\overline{)\$6.18}$

$\$2.00$
$3\overline{)\$6.00}$

② estimate

$4\overline{)\$9.28}$

③ estimate

$5\overline{)\$8.85}$

④ estimate

$2\overline{)\$7.50}$

C. Solve.

Tony puts the same amount of money into his bank each week. After 3 weeks Tony had $8.79. About how much did Tony put in his bank each week?

_____

P.O. 4.05.05.02 & .04

NAME: _____ CLASS: _____ DATE: _____

Solve and check.

① check $\$.15$ $5\overline{)\$.75}$ $\$.15$ $\times \quad 5$ $\$.75$	② check $2\overline{)\$.30}$
③ check $7\overline{)\$.49}$	④ check $3\overline{)\$.69}$
⑤ check $4\overline{)\$.84}$	⑥ check $6\overline{)\$.96}$
⑦ If 3 pens cost $.78, how much will one pen cost? _____	solve check
⑧ Mr. Carson gave his two sons $.98 to share. How much did each boy get? _____	solve check

P.O. 4.05.05.03-.04

NAME: _____ CLASS: _____ DATE: _____

Estimate, solve, and check.

① Estimate = $5.00

solve check

$4.87
2)$9.74

$4.87
× 2
$9.74

② Estimate = _____

solve check

5)$6.75

③ Estimate = _____

solve check

7)$8.47

④ Estimate = _____

solve check

3)$9.84

⑤ Ms. Bennet bought 5 pounds of sugar for $2.95. How much did one pound of sugar cost?

estimate solve check

One pound of sugar cost _____.

⑥ Brad had $6.27 to share among his 3 younger brothers. How much did Brad give to each of his younger brothers?

estimate solve check

He gave each brother _____.

P.O. 4.01.06.01-.02

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Complete the chart.

Roman Numerals

1 =	_____	6 =	_____
2 =	_____	7 =	VII
3 =	_____	8 =	_____
4 =	_____	9 =	_____
5 =	V	10 =	_____

B. Write each of the following as Roman numerals.

24 =	XXIV	66 =	_____
52 =	_____	97 =	_____
17 =	_____	83 =	_____
100 =	_____	45 =	_____
30 =	_____	11 =	_____

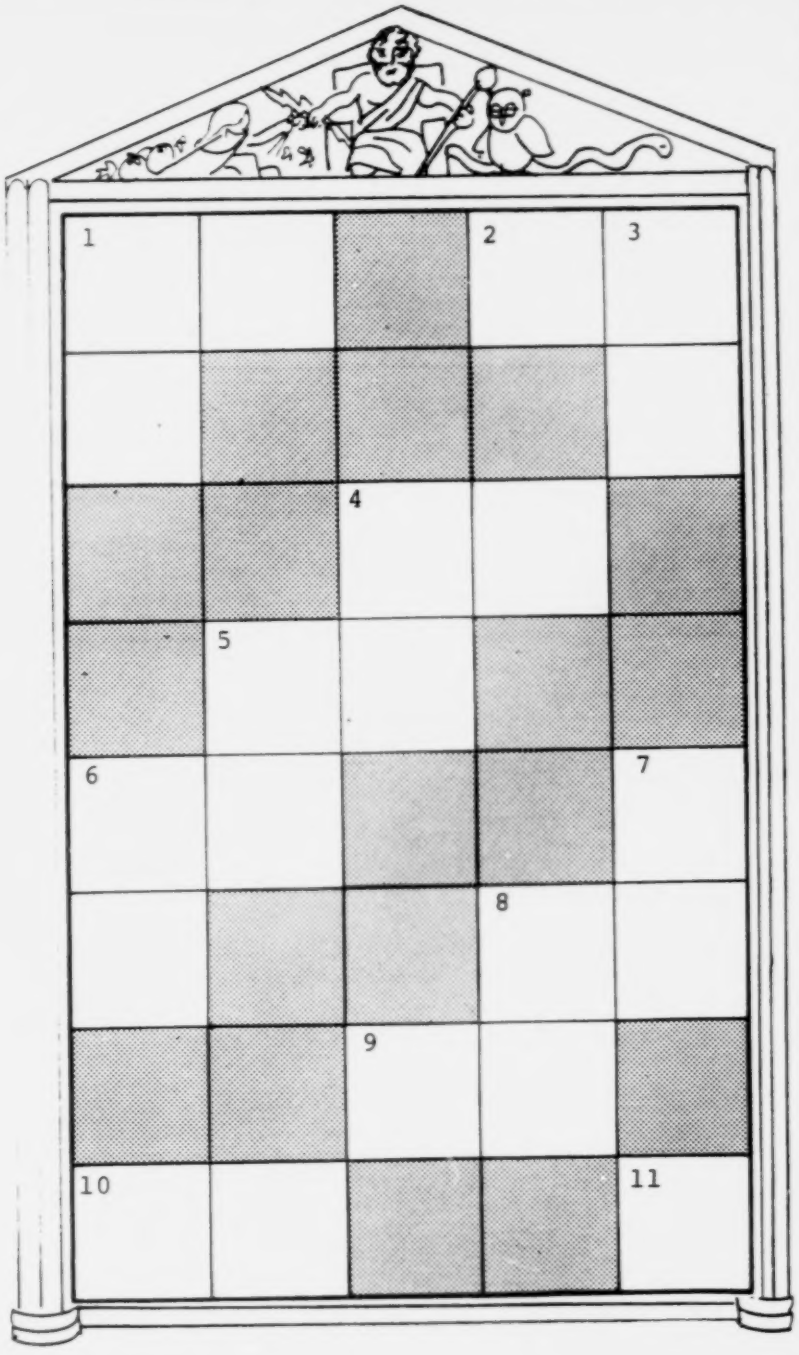
C. Draw a line to connect each Arabic numeral with its equivalent Roman numeral.

33	LVII
14	XCVI
9	XXXIII
96	XXXVIII
57	IX
38	XIV

P.O. 4.01.06.03

NAME: _____ CLASS: _____ DATE: _____

Rename Roman Numerals as Arabic Numerals.
Complete the cross number puzzle.



ACROSS

1. XXXIV
2. LV
4. XXIX
5. LXXXV
6. L
8. LXXVII
9. XLI
10. XVIII
11. IV

DOWN

1. XXXIX
3. LI
4. XXV
5. LXXX
6. LIX
7. XCVII
8. LXXI

P.O. 4.01.06.04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A.

Below each Roman number, write its value.

I	V	X	L	C
_____	_____	_____	_____	_____

B.

Write the following as Roman numerals.

1. 135 = CXXXV
2. 200 = _____
3. 310 = _____
4. 140 = _____
5. 322 = _____
6. 280 = _____
7. 399 = _____
8. 265 = _____
9. 172 = _____
10. 300 = _____
11. 105 = _____
12. 219 = _____
13. 238 = _____
14. 333 = _____

Do you remember?

Complete the chart.

_____ pints = 2 quarts

_____ cups = 1 quart

4 quarts = _____ gallon

6 pints = _____ quarts

12 quarts = _____ gallons

SHARPENING YOUR SKILLS

Units 45, 46, 47

Name: _____ **Class:** _____ **Date:** _____

1. Round each amount to the nearest dollar.

   $3.97 rounds to _____.

   $2.54 rounds to _____.

   $8.43 rounds to _____.

   $5.02 rounds to _____.

2. Estimate the product.

$$\begin{array}{r} \$4.16 \\ \times\ \ 2 \\ \hline \end{array}$$

   (a) $8.32 (c) $6.00

   (b) $8.00 (d) Not Here

3. Find the product.

$$\begin{array}{r} \$.95 \\ \times\ \ 4 \\ \hline \end{array}$$

   (e) $38.00 (g) $3.60

   (f) $ 3.80 (h) Not Here

4. Multiply.

$$\begin{array}{r} \$3.54 \\ \times\ \ 4 \\ \hline \end{array}$$

5. John bought 6 pens at $.25 each. How much did he pay for the pens?

   (a) $1.00 (c) $1.75

   (b) $1.25 (d) Not Here

6. Estimate the quotient.

$3\overline{)\$8.75}$

   (e) $3.00 (g) $2.75

   (f) $2.00 (h) Not Here

7. Find the quotient.

$4\overline{)\$.96}$

8. Three Gobots are on sale for $7.56. How much will one Gobot cost?

   _____

9. Draw lines to match each Roman numeral with its correct value.

I	10
C	50
X	1
V	100
L	5

10. CIX = ☐

    (a) 110 (c) 109

    (b) 101 (d) Not Here

11. Write 87 as a Roman numeral.

    87 = ☐

P.O. 4.10.05.01-.02

NAME:_____ CLASS:_____ DATE:_____

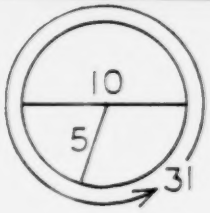
Answer the items below.

① Circle the objects that can help you measure a circumference.

belt knife yarn

stick string cube

②



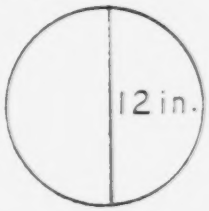
Which number represents:

radius_____ diameter _____

circumference_____

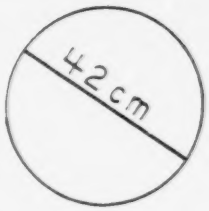
③ Estimate the circumference of each circle below.

The circumference is about _____ inches.



The circumference is about _____ inches.

The circumference is about _____ cm.



The circumference is about _____ cm.

④ Judith baked a pie that measured 9 inches across. What is the distance around the outside of the pie?

The distance is about____inches.

⑤ Jessie jogs around a track that is 300 meters around. About how long is the diameter of the track?

The diameter is about____meters.

132

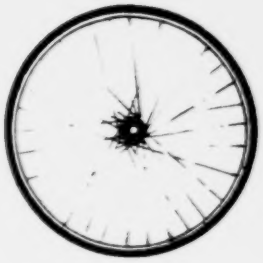
P.O. 4.10.05.03

NAME: _____ CLASS: _____ DATE: _____

Estimate the circumference of these objects.

Bicycle tire

radius = 25 cm



Estimated Circumference _____

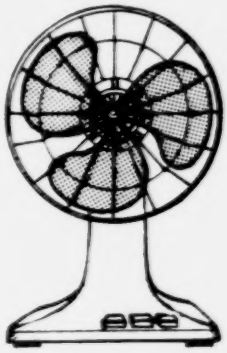
Bracelet

radius = 3 cm

Estimated Circumference _____

Fan

radius = 15 cm



Estimated Circumference _____

Ring

radius = 1 cm

Estimated Circumference _____

Birdbath

radius = 2 dm

Estimated Circumference _____

Basketball hoop

radius = 8 inches

Estimated Circumference _____

P.O. 4.02.03.01-.02

NAME:_____ CLASS:_____ DATE:_____

Follow the directions below.

Use the associative property of addition to complete the following number sentences.

1. $(26 + 37) + 14 = \square$

$26 + (37 + 14) = \square$

$26 + (37 + 14) = (26 + 37) + ____$

2. $(75 + 11) + 26 = \square$

$75 + (11 + 26) = \square$

$(75 + 11) + ___ = 75 + (11 + 26)$

Use parentheses to show two different ways to find the sum.

3. $478 + 816 + 975 = \square$

$478 + 816 + 975 = \square$

4. $\$.56 + \$.85 + \$.29 = \square$

$\$.56 + \$.85 + \$.29 = \square$

Find the cost in two different ways for 1 adult, 1 child, and 1 senior citizen to attend the movies. Use the associative property of addition.

5.

Movie Ticket Prices			
Adults	$3.50	Children	$1.75
Senior Citizens	$2.15		

A.

B.

P.O. 4.02.04.01 & .03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Estimate each sum by rounding the addends to the nearest ten thousand. Complete each example and check by adding up.

estimate	solve	estimate	solve
50,000 +30,000 80,000	48,132 +27,059		26,919 +11,997
estimate	solve	estimate	solve
	39,186 +21,216		$555.21 + 300.99
estimate	solve	estimate	solve
	68,797 +28,790		18,952 +56,705

B. Solve each problem.

On a giant ant farm in Africa, 21,156 ants were born in 1985. The following year, 32,899 ants were born. How many ants were born during the two years?

_____ ants were born.

There is not enough food grown in parts of Africa to feed the people. One country air lifted 72,632 tons of food. Another country air lifted 10,038 tons of food. How much food did both countries air lift?

_____ tons of food

Do you remember?

	check		check		check
$4\overline{)73}$		$3\overline{)684}$		$5\overline{)561}$	

P.O. 4.02.04.02-.03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Estimate each sum by rounding the addends to the greatest place value. Complete each example and check by adding up.

estimate	solve	estimate	solve
800,000 +100,000 900,000	845,132 +119,880		$2,654.35 + 6,148.05
estimate	**solve**	**estimate**	**solve**
	$4,035.06 + 2,113.69		287,600 +396,730

B. Solve each problem.

Ellen and Jason Crane are buying a new car. Ellen saved $6,080.50. Jason saved $3,495.00. How much did they save together?

They saved _____ together.

375,921 cars were made in Detroit. 429,882 cars were made in Japan. How many cars were made in Detroit and Japan?

_____ cars were made in Detroit and Japan.

C. These problems are missing questions. Read the information, write a question for each, and then solve each problem.

136,688 salmon swam upstream in Colorado during 1978. During the next year, 236,510 salmon swam upstream.

Question: _____

_____

Answer: _____

A bank paid $2,411.02 in interest to John Crane and $1,009.99 in interest to Sally Crane.

Question: _____

_____

Answer: _____

SHARPENING YOUR SKILLS

Units 48, 49, 50

Name _____ **Class:** _____ **Date:** _____

1. The distance around a circle is called the _____.

2. If the diameter of a circle is 5 cm, the circumference of that circle is about _____ cm.

3. If the radius of a circle is 3 inches, the circumference of that circle is about _____ inches.

4. What number belongs in the box?

$(42 + 16) + 5 = 42 + (\square + 5)$

(a) 63 (c) 21

(b) 16 (d) Not Here

5. What number belongs in the box?

$(\square + 20) + 10 = 29 + (20 + 10)$

(e) 20 (g) 29

(f) 30 (h) Not Here

6. What sum will make both number sentences true?

$(12 + 18) + 6 = \square$

$12 + (18 + 6) = \square$

(a) 36 (c) 30

(b) 24 (d) Not Here

7.
$$\begin{array}{r} 325{,}439 \\ +218{,}266 \\ \hline \end{array}$$

(e) 107,173 (g) 542,805

(f) 542,714 (h) Not Here

8. Find the sum.

$$\begin{array}{r} 18{,}235 \\ 21{,}406 \\ +32{,}151 \\ \hline \end{array}$$

9. Find the sum.

$$\begin{array}{r} \$1{,}256.29 \\ +\ 6{,}588.12 \\ \hline \end{array}$$

10. A school district recorded the following attendance for three days:

Monday - 12,404 students
Tuesday - 10,845 students
Wednesday - 11,964 students

Find the total attendance for the 3 days.

_____ students

P.O. 4.03.03.01-.02

NAME: _____ CLASS: _____ DATE: _____

Solve and check each example. Write the letter of each example above the answer at the bottom of the page to complete the message.

solve	check	solve	check	solve	check
300,000 - 189 A	 + 189 300,000	88,356 - 32,196 T		$500.00 - 493.88 $. C	
solve	**check**	**solve**	**check**	**solve**	**check**
$3,000.00 - 189.50 E		100,000 - 43,841 S		$1,565.90 - 868.09 P	
solve	**check**	**solve**	**check**	**solve**	**check**
91,884 -35,721 F		200,000 - 18,950 R		61,328 - 5,166 H	

If you can read this message,

56,160	56,162	299,811	56,160	56,159

!

$697.81	$2,810.50	181,050	56,163	$2,810.50	$6.12	56,160

P.O. 4.03.03.03

NAME: _____ CLASS: _____ DATE: _____

Solve the problems below. Check your work.

① Mr. Gray went grocery shopping with $100.00. He spent $84.23. How much money did he have left?

He had _____ left.

② A city's police force has 18,630 members. If 3,557 are women, how many are men?

_____ are men.

③ There are 250,000 miles between the Earth and the Moon. A spaceship has already traveled 463 miles into space. How much further must it go to reach the Moon?

_____ miles

④ People sleep an average of 28,800 seconds a night. They have dreams for about 3,945 seconds. How many seconds do people spend sleeping without dreaming?

_____ seconds

Do you remember?

$3 \times \frac{1}{8} = \square$ $2 \times \frac{3}{6} = \square$ $4 \times \frac{2}{9} = \square$ $2 \times \frac{1}{3} = \square$

P.O. 4.04.04.01

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

Complete the charts below.

A.

X	4	40	400	4,000	40,000
2	8	80	800		80,000
4		160	1,600	16,000	
7	28	280	2,800		
8	32	320	3,200		

B.

X	1	10	100	1,000	10,000
3	3	30	300		
5	5	50			
6	6		600		
9	9	90	900		

Complete each group of examples below.

C.

7 x 1 = 7

7 x 10 = 70

7 x 100 = 700

7 x 1,000 = ☐

7 x 10,000 = ☐

D.

3 x 5 = 15

3 x 50 = 150

3 x 500 = 1,500

3 x 5,000 = ☐

3 x 50,000 = ☐

E.

1,000	4,000	10,000	80,000
x 6	x 2	x 3	x 7

F.

8 x ☐ = 8,000

5 x ☐ = 50,000

140

P.O. 4.04.04.02 & .04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Estimate the product. Then find the exact product.

1. estimate / solve	2. estimate / solve
4,000 x 2 / 4,322 x 2	2,303 x 3
3. estimate / solve	**4. estimate / solve**
1,241 x 2	3,012 x 3
5. estimate / solve	**6. estimate / solve**
2,021 x 4	2,122 x 2

B. Solve the problems below in two ways, using addition and using multiplication.

In 1976, the North City fire department had 2,302 firefighters. In 1986, they had 3 times as many firefighters. How many firefighters did they have in 1986?	A plane flew a distance of 2,120 miles from New York City to Caracas, Venezuela. The plane then flew back to New York City. Find the total mileage for the trip.
_____ firefighters	_____ miles

P.O. 4.04.04.03-.04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Complete all the examples,
Write [Y] in the box if you regrouped (exchanged).
Write [N] in the box if you did not regroup (exchange).

①	②	③	④
[N]	[ ]	[ ]	[ ]
2,432	4,102	4,251	6,215
x 2	x 2	x 3	x 4

⑤	⑥	⑦	⑧
[ ]	[ ]	[ ]	[ ]
1,246	3,213	3,680	7,115
x 5	x 2	x 6	x 8

B. Solve the problems.

1. A copying machine can print 2,315 copies in 1 hour. How many copies can it print in 5 hours?

_____ copies

2. There are 3,600 seconds in 1 hour. How many seconds are there in 4 hours?

_____ seconds

CHALLENGE! How can the digits 2, 3, 5, 6, and 8 be arranged in the boxes below to give the greatest product? Find the product.

[ ] [ ] [ ] [ ]

X [ ]

_____

142

SHARPENING YOUR SKILLS

Units 51, 52

Name: _____ **Class:** _____ **Date:** _____

1. 700,000 − 8,206

(a) 691,894 (c) 692,804

(b) 691,794 (d) Not Here

2. Solve and check.

$854.69 − 275.89

3. 3,857 × 3

(e) 11,571 (g) 9312

(f) 924,521 (h) Not Here

4. Multiply.

40,000 × 4

5. 4,266 × 5

(a) 210,300 (c) 21,330

(b) 21,396 (d) Not Here

6. Ms. Green paid $9,000.00 for her new car. A week later, she saw the same car on sale for $7,998.45. How much would she have saved if she had bought it on sale?

(e) $2,998.45 (g) $1,001.55

(f) $1.55 (h) Not Here

7. The Sports Center can seat 16,000 fans. One night, only 6,872 fans showed up to see the hockey game. How many empty seats were there?

(a) 22,872 (c) 10,872

(b) 9,128 (d) Not Here

8. 1,236 students attend Greenbriar School. If every student attended school for 5 days in a row, what would the school's total attendance be for the 5 days?

(e) 1,258 (g) 8,315

(f) 103,015 (h) Not Here

9. There are 1,760 yards in 1 mile. How many yards are in 4 miles?

_____ yards

P.O. 4.05.06.01-.02

NAME:_____ CLASS:_____ DATE:_____

Solve and check.

① $3\overline{)6,909}$ check

② $5\overline{)1,585}$ check

③ $2\overline{)2,755}$ check

④ $7\overline{)2,319}$ check

⑤ Mr. Farber's hobby is stamp collecting. During the last 3 years, he collected 1,854 stamps. There are 9 stamps on each page in his album. How many pages are in his album?

solve check

⑥ A farm in Kansas harvested 4,297 ears of corn. If 7 ears of corn are packed to a carton, how many cartons are needed?

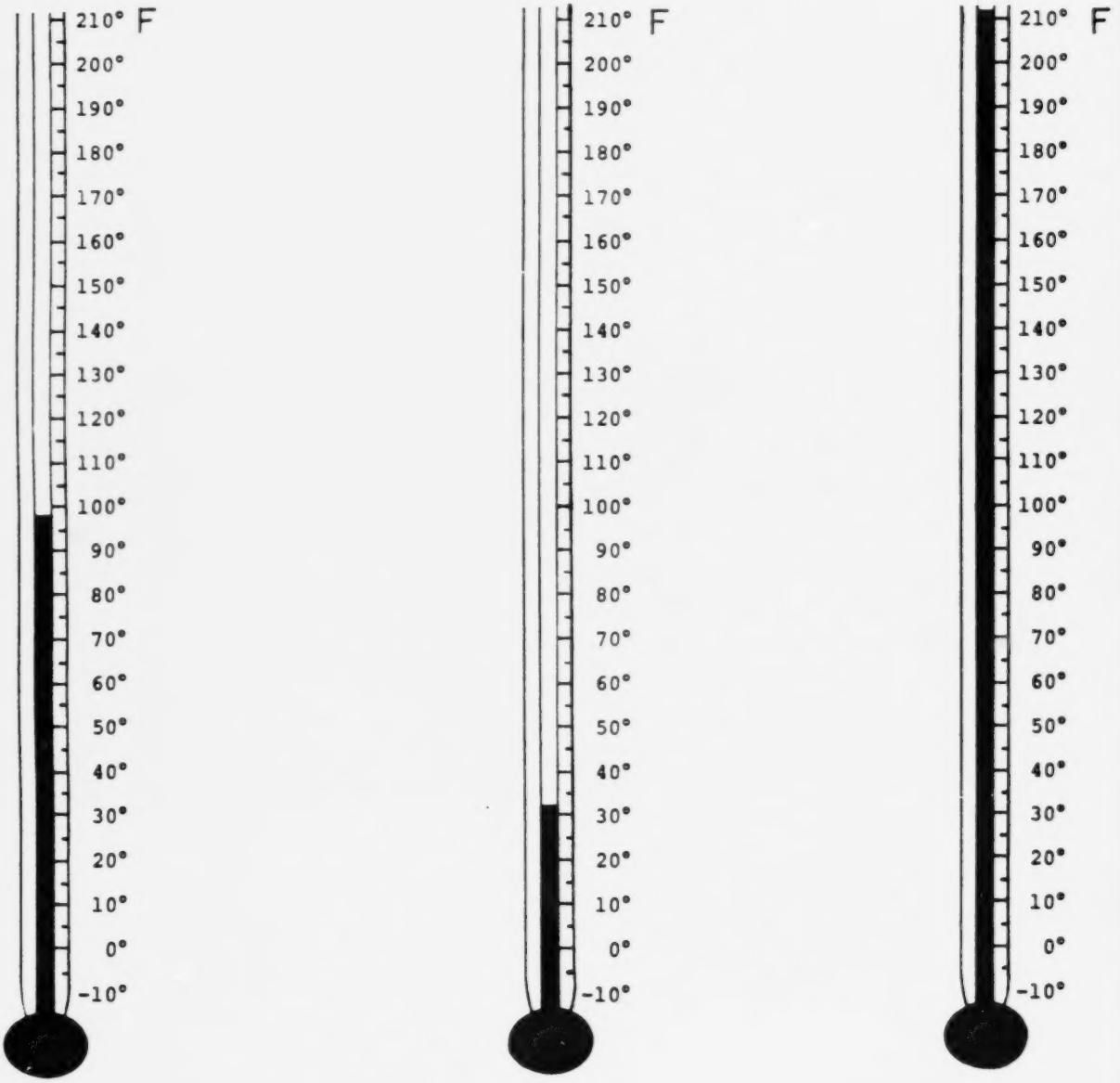
solve check

P.O. 4.10.06.01

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

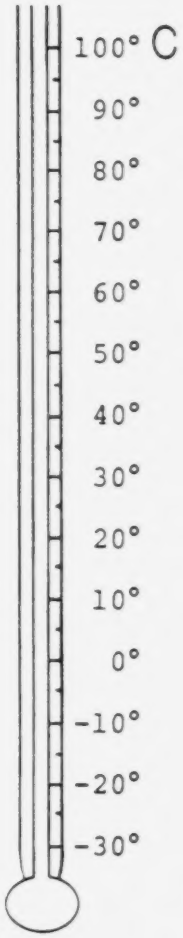
1. Place an X under the thermometer that shows the freezing point of water.
2. Place a △ under the thermometer that shows the boiling point of water.
3. Place a □ under the thermometer that shows normal body temperature.



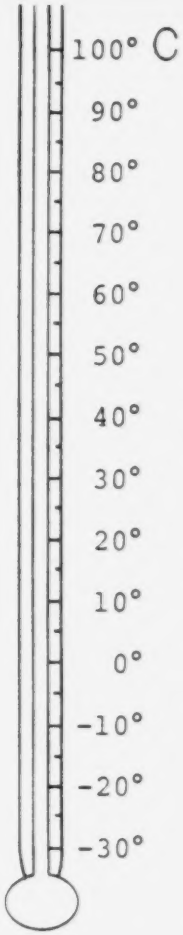
P.O. 4.10.06.02

NAME: _____ CLASS: _____ DATE: _____

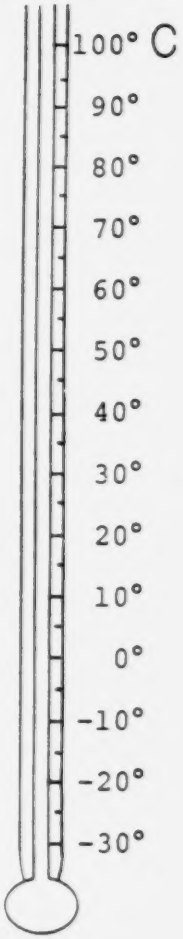
Shade each Celsius thermometer below to show the correct temperature.



Normal Body Temperature



Boiling Point of Water



Freezing Point of Water

CHALLENGE!

Draw a line to connect each temperature with the correct phrase.

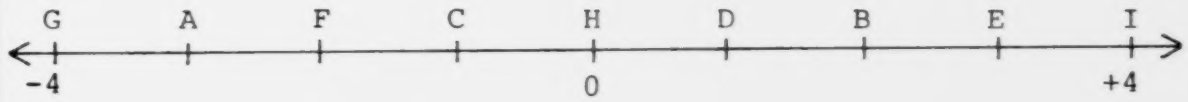
27°C	a very cold day
-8°C	a very hot day
35°C	a warm day

P.O. 4.08.01.01-.02

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

Complete the number line.

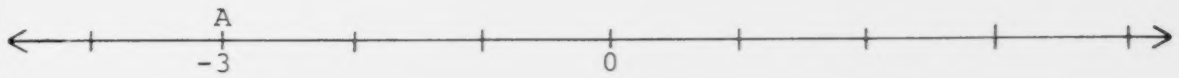


Write the value for each letter.

A = _____ C = _____ E = _____

B = _____ D = _____ F = _____

Write each letter above the number line according to the directions.



A = -3 E = 0 L = +1

S = +4 U = +3 R = -2

V = -1 M = -4 O = +2

What word do the letters spell?

_____

Write the signed numbers below.

4 greater than zero = ____ 3 to the left of zero = ____

38 greater than zero = ____ 15 to the right of zero = ____

12 less than zero = ____ 1 less than zero = ____

62 greater than zero = ____ 87 to the left of zero = ____

106 to the right of zero = ____ 32 greater than zero = ____

P.O. 4.08.01.03-.04

NAME:_____ CLASS:_____ DATE:_____

Follow the directions below.

I. Place a + on the line next to the sentences that represent positive numbers and a − on the line next to the sentences that represent negative numbers.

a. + The temperature is 10° above 0.

b. ___ The football team gained 12 yards.

c. ___ Joe gained 7 pounds.

d. ___ I spent $36.00.

e. ___ We live 200 feet above sea level.

f. ___ The temperature is 5° below 0.

g. ___ Teddy lost 3 pounds.

h. ___ The lake is 100 feet below sea level.

II. Solve each problem below.

a. The temperature was 15°C. It got 10° warmer. What was the temperature then?

_____

b. On a cold day, the temperature was -5°C. During the night the temperature dropped 7°. What was the temperature then?

_____

CHALLENGE! How many jumps on the number line must we make to get from -6 to +7?

Hint: Draw a number line. _____ jumps

SHARPENING YOUR SKILLS

Units 53, 54, 55

Name _____ **Class:** _____ **Date:** _____

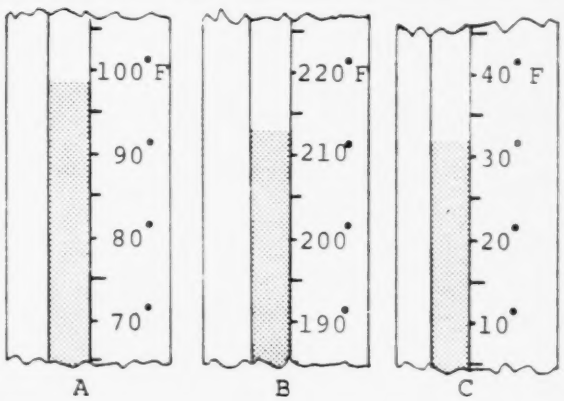
1. 3)6,936 check

2. A fruit drink company places 6 drinks in each pack. How many packs are needed for 8,496 drinks?

   (a) 1,016 (c) 1,616

   (b) 1,416 (d) Not Here

Use the Fahrenheit thermometers below to answer questions 3 - 5.

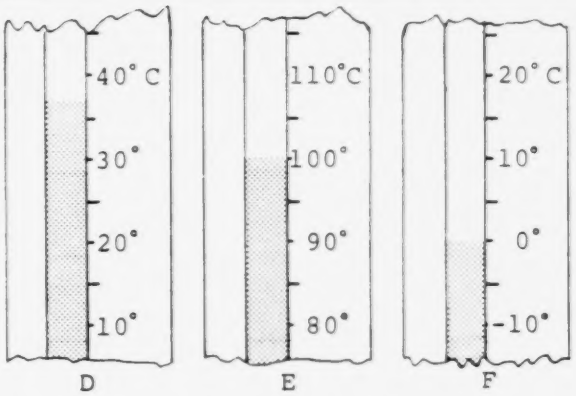


3. Which thermometer shows the temperature at which water freezes? _____

4. Which thermometer shows the temperature at which water boils? _____

5. Which thermometer shows normal body temperature? _____

Use the Celsius thermometers below to answer questions 6 - 8.



6. Which thermometer shows the temperature at which water freezes? _____

7. Which thermometer shows normal body temperature? _____

8. Which thermometer shows the temperature at which water boils? _____

9. Which sentence below is true?

   (e) Negative numbers are greater than 0.

   (f) Positive numbers are less than 0.

   (g) -2 is greater than -4.

   (h) Not Here

10. The daytime temperature on the Celsius thermometer was at 0. At night, it became 2 colder. What was the temperature then?

    (a) 0° C (c) 2° C

    (b) -2° C (d) Not Here

P.O. 4.12.04.01

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Show all the possible arrangements for the groups below.

1. red, blue

2. A, B, C

3. 3, 4, 5

4. dime, quarter

B. Complete the sentences below.

1. When there are 2 items to arrange, we can show _____ different arrangements.

2. When there are 3 items to arrange, we can show _____ different arrangements.

150

P.O. 4.12.04.02

NAME: _____ CLASS: _____ DATE: _____

Solve each problem below.

1. Theo has a red pencil, a blue pencil, and a black pencil. Show all the ways Theo can arrange these pencils on his desk.

red, blue, black

2. Show all the different numbers that can be made using the digits 3, 4, and 9.

3. Jerry picked three playing cards, a jack, a queen, and a king. Show all the different ways Jerry can arrange these cards.

CHALLENGE!

Find all the different ways the following four numbers can be arranged.

4, 3, 2, 1

How many arrangements did you find? _____

P.O. 4.13.04.01

NAME: _____ CLASS: _____ DATE: _____

Use the calendar below to answer the questions.

August						
S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1. List the dates for all the Sundays this month.

   _____

   What pattern do you notice?

   _____

2. Look at the four numbers in the box. If you add each pair of numbers diagonally, what do you notice about the sums?

   _____

3. Look at the numbers in the loop. What pattern do you notice?

   _____

4. Complete the following patterns using the calendar.

   a. 2, 10, 18, _____

   b. 3, 10, 17, _____, _____

   c. 1, 7, 13, _____, _____, _____

   d. 30, 24, _____, _____, _____

CHALLENGE!

What is the sum of all the dates on the calendar above?

_____

152

P.O. 4.13.04.02

NAME: _____ CLASS: _____ DATE: _____

Color Loop A yellow, Loop B orange, and Loop C green. Then follow the directions below.

x	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	★	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Loop A

Loop B

Loop C

A. Look at the pattern in Loop A. Find the same pattern in a vertical column. Draw a loop around that pattern and color it yellow.

B. Look at the pattern in Loop B. Find the same pattern in a vertical column. Draw a loop around that pattern and color it orange.

C. Look at the pattern in Loop C. Find the same pattern in a vertical column. Draw a loop around that pattern and color it green.

D. Complete this pattern 0,8,16,__,__,__,__,__,__,__,__,__.

E. Use a pattern to discover the product hidden by the ★.
★ = _____.
What pattern did you use? _____.

F. Write a pattern of numbers which are on a diagonal.
_____.

P.O. 4.06.07.01-.02

NAME:_____ CLASS:_____ DATE:_____

List the factors for each group of numbers below. List the common factor. Find the greatest common factor.

6 20

The factors of 6 are _____.

The factors of 20 are _____.

The common factors of 6 and 20 are _____.

The greatest common factor of 6 and 20 is _____.

16 24

The factors of 16 are _____.

The factors of 24 are _____.

The common factors of 16 and 24 are _____.

The greatest common factor of 16 and 24 is _____.

12 18 24

The factors of 12 are _____.

The factors of 18 are _____.

The factors of 24 are _____.

The common factors of 12, 18, and 24 are _____.

The greatest common factor of 12, 18, and 24 is _____.

14 16 22

The factors of 14 are _____.

The factors of 16 are _____.

The factors of 22 are _____.

The common factors of 14, 16, and 22 are _____.

The greatest common factor of 14, 16, and 22 is _____.

P.O. 4.06.07.03-.04

NAME:_____ CLASS:_____ DATE:_____

Circle the common multiples for each group of numbers below.
Write the least common multiple (LCM).

6 | 6 8 | 50

18 12 24 48 15

30 72

26 36 32

The least common multiple of 6 and 8 is 24.

36 | 12 8 | 40

12 60 64

96 24

48 16 32 56 72

The least common multiple of 12 and 8 is _____.

12 | 2 8 4 | 64

24 4 20 40

84

8 16 26 30 70

The least common multiple of 2, 8, and 4 is _____.

96 | 6 16 24 | 12

48

32 80 66

38

36 6 64 10 16

The least common multiple of 6, 16, and 24 is _____.

SHARPENING YOUR SKILLS

Units 56, 57, 58

Name _____ **Class:** _____ **Date:** _____

1. Hal wants to buy a bicycle. The store sells 3-speed, 5-speed, and 10-speed bikes. Each type of bike comes in blue, red, green, or white. How many choices does Hal have?

   (a) 18 (c) 7

   (b) 12 (d) Not Here

2. A clown has a striped shirt and a polka-dot shirt. She has plaid pants, striped pants, and polka-dot pants. How many different outfits can she make?

   (e) 5 (g) 6

   (f) 3 (h) Not Here

3.

Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18

If you add the numbers in the box diagonally, what pattern do you notice?

_____

_____

_____

Draw a box around 4 other numbers. Did you notice the same thing? _____

4. What are the common factors of 8 and 12?

   (a) 1,2,4 (c) 2,4,6,12

   (b) 1,2,3,4 (d) Not Here

5. List all the factors of 12 and 24.

   Factors of 12 = _____

   _____

   Factors of 24 = _____.

   _____

6. What is the greatest common factor of 10 and 15?

   (e) 3 (g) 10

   (f) 5 (h) Not Here

7. What is the greatest common factor of 8,12, and 16?

   (a) 4 (c) 2

   (b) 8 (d) Not Here

8. What is the least common multiple of 2 and 5?

   (e) 2 (g) 10

   (f) 1 (h) Not Here

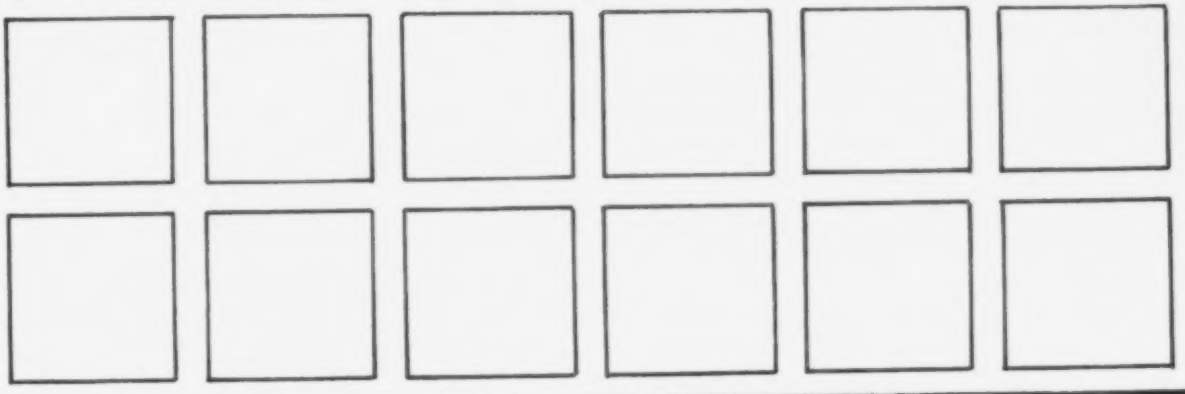
9. The least common multiple of 6 and 8 is _____.

P.O. 4.10.07.01

NAME: _____ CLASS: _____ DATE: _____

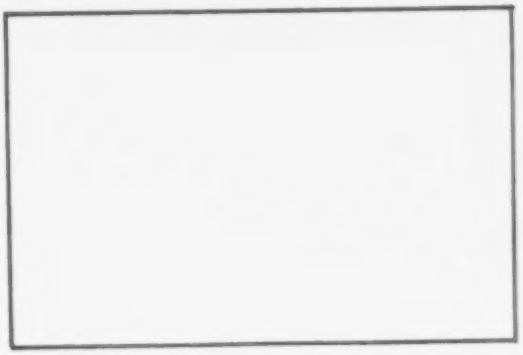
Follow the directions below.

A. Each small square is 1 square inch. Cut out each square inch.



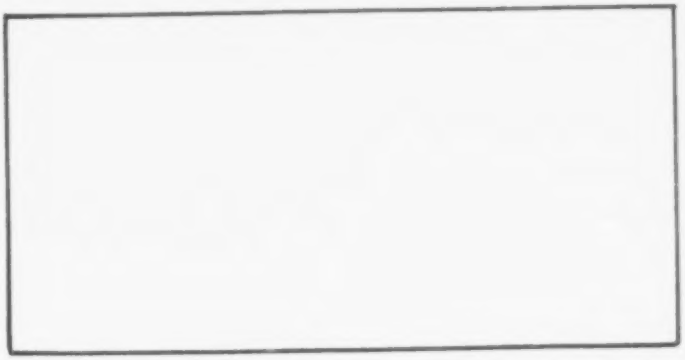
B. Use the square inches to find the area of each figure below.

1.



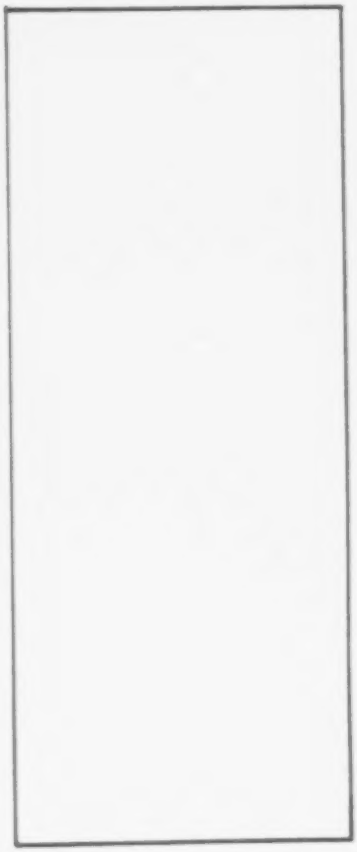
Area = _____ square inches

2.



Area = _____ square inches

3.



Area = _____ square inches

P.O. 4.10.07.02

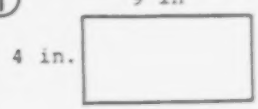
NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Circle the correct words to complete the sentence below.

To find the area of a rectangle, we (add, multiply) the length and the (width, inside).

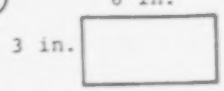
B. Use the formula to find the area of each rectangle below.

① 

Area = length x width

Area = 4 in. x 9 in.

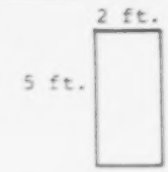
Area = 36 sq. in.

② 

Area = length x width

Area = _____ x _____

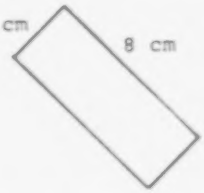
Area = _____ sq. in.

③ 

Area = _____

Area = _____ x _____

Area = _____ sq. ft.

④ 

Area = _____

Area = _____ x _____

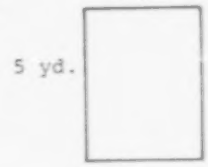
Area = _____ sq. cm

⑤

Area = _____

Area = _____ x _____

Area = _____ sq. ft.

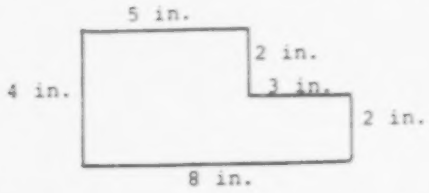
⑥ 

Area = _____

Area = _____ x _____

Area = _____ sq. yd.

CHALLENGE! Can you find the area of this figure?



Hint: Draw a line that will form 2 rectangles from this figure.

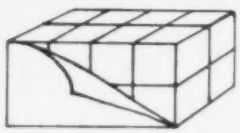
159

P.O. 4.10.08.01-.02

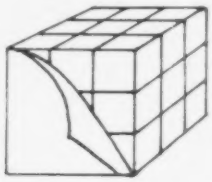
NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

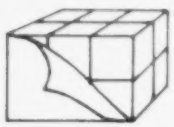
A. Count the cubes to find the volume of each rectangular prism below.

1. 

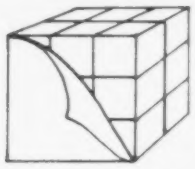
Volume = _____ cubic units

2. 

Volume = _____ cubic units

3. 

Volume = _____ cubic units

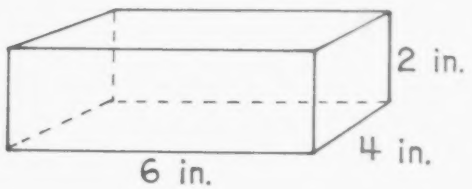
4. 

Volume = _____ cubic units

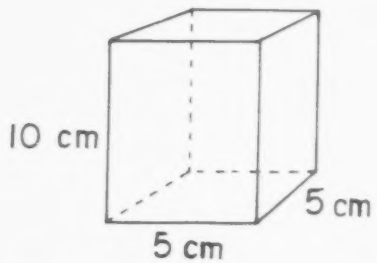
B. Complete the formula below.

Volume = _____

C. Use the formula to find the volume of the following rectangular prisms.



Volume = _____

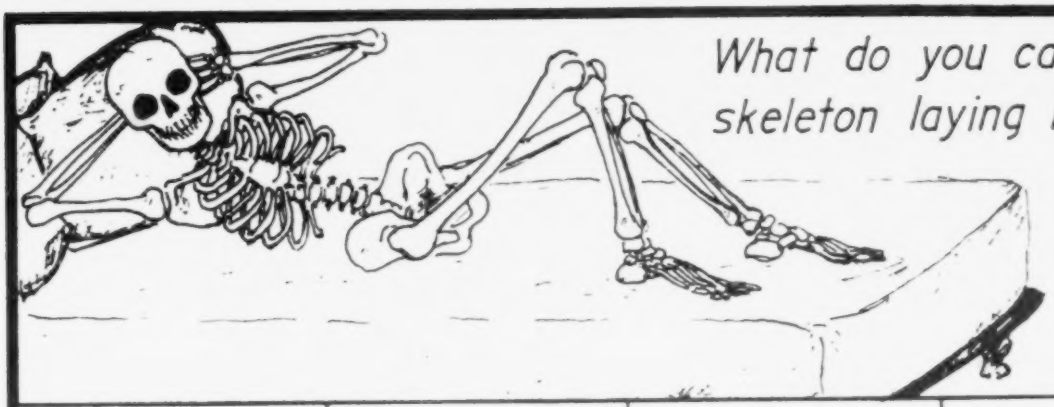


Volume = _____

P.O. 4.07.03.01-.02

NAME: _____ CLASS: _____ DATE: _____

Solve each example. Use the key to solve the riddle by writing the letter for each answer in the box below the example.



What do you call a skeleton laying in bed?

5.07 +4.12 9.19 L	0.40 0.37 0.19 +0.02	4.36 -2.18	7.63 +8.49
0.60 0.12 0.28 +1.30	1.19 -0.83	1.06 1.10 3.22 +4.35	7.36 -5.36	3.60 4.16 1.01 +2.24

Key:

A	B	E	L	N	O	S	Y	Z
0.98	2.30	2.00	9.19	9.73	0.36	11.01	16.12	2.18

P.O. 4.07.03.03

NAME:_____ CLASS:_____ DATE:_____

Solve the problems below.

1. When Penny first started jogging, she ran 0.6 kilometers and then walked 0.75 kilometers. How far did she go in all? She went _____ kilometers.	4. Robert bought 3.75 pounds of ham and cheese. There was 1.54 pounds of ham. How much cheese did he buy? He bought ____ pounds of cheese.
2. Soon Penny was able to run 3.36 miles and walk 2.81 miles. How far could she go then? She could go ___ miles.	5. Robert also bought two chickens. One chicken weighed 3.86 pounds and the other weighed 3.55 pounds. How much did the chickens weigh together? The chickens weighed _____ pounds.
3. Penny ran in a race that was 5.50 miles long. After she ran 2.25 miles, how far did she still have to go? She had _____ miles to go.	6. Robert bought 1.5 pounds of bologna and 1.8 pounds of salami. How much did the bologna and the salami weigh together? The bologna and the salami weighed _____ pounds.

SHARPENING YOUR SKILLS

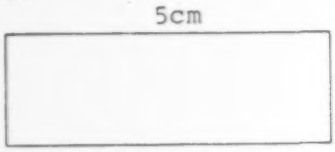
Units 59,60,61

Name: _____ **Class:** _____ **Date:** _____

1. Write the formula used to find the area of a rectangle.

   Area = _____

2. What is the area of the rectangle below?



   (a) 14 sq. cm (c) 20 sq. cm

   (b) 10 sq. cm (d) Not Here

3. Find the area of a rectangular garden that is 7 feet long and 6 feet wide.

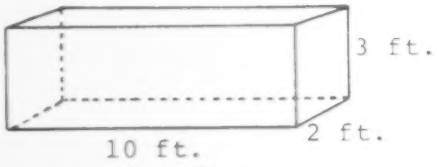
   (e) 42 sq. ft. (g) 26 sq. ft.

   (f) 13 sq. ft. (h) Not Here

4. Write the formula used to find the volume of a rectangular prism.

   Volume = _____

5. Find the volume.



   (a) 15 cu. ft. (c) 60 cu. ft.

   (b) 30 cu. ft. (d) Not Here

6. Find the sum.

$$\begin{array}{r} 2.1 \\ 1.5 \\ +3.7 \\ \hline \end{array}$$

   (e) 6.13 (g) 73.0

   (f) 7.3 (h) Not Here

7. Add. $\begin{array}{r} 4.43 \\ +3.91 \\ \hline \end{array}$

8. Subtract and check.

$$\begin{array}{r} 8.7 \\ -1.9 \\ \hline \end{array}$$

9. Find the difference.

$$\begin{array}{r} 5.6 \\ -2.4 \\ \hline \end{array}$$

   (a) 8.0 (c) .32

   (b) 32.0 (d) Not Here

10. Bob bought 2.56 pounds of chopped meat and 1.98 pounds of pork chops. Find the total weight of meat.

    (e) 0.58 pounds (g) 4.54 pounds

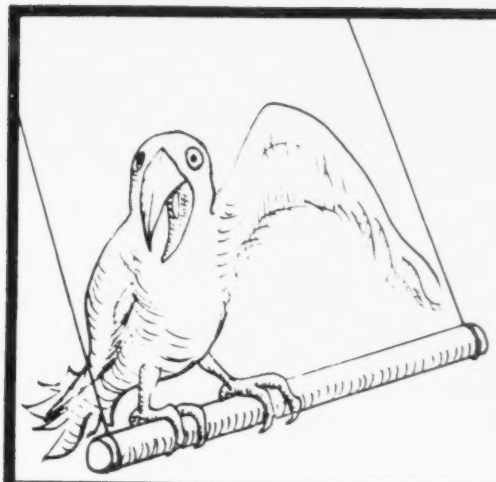
    (f) 3.44 pounds (h) Not Here

11. How much greater is 2.5 than 1.43? _____

P.O. 4.07.04.01

NAME: _____ CLASS: _____ DATE: _____

Multiply. Use the key to solve the riddle.



What is another name for a parrot?

A

W

1	2	3	4	5

6	7	8	9	10

①	②	③	④	⑤
0.6 × 0.4 = .24	1.7 × 0.6 =	1.6 × 0.7 =	0.9 × 0.6 =	7.4 × 0.2 =
⑥	⑦	⑧	⑨	⑩
7.1 × 0.8 =	1.2 × 0.8 =	5.6 × 0.2 =	1.8 × 0.3 =	3.7 × 0.4 =

Key	B	D	I	O	R	W	Y
	5.68	0.54	0.96	1.02	1.12	0.24	1.48

Do you remember?

	check		check		check
10,000 - 478		40,000 - 1,262		200,000 - 38,918	

P.O. 4.07.04.02

NAME: _____ CLASS: _____ DATE: _____

Solve and check the examples below.

① check $6\overline{)30.6}$	② check $2\overline{)48.6}$
③ check $4\overline{)28.4}$	④ check $9\overline{)63.9}$
⑤ check $4\overline{)1.6}$	⑥ check $5\overline{)51.5}$
⑦ check $7\overline{)57.4}$	⑧ check $8\overline{)26.4}$

P.O. 4.07.04.03

NAME: _____ CLASS: _____ DATE: _____

Solve the word problems below.

① At a ribbon cutting ceremony for a new Hall of Science, the mayor cut an 11.4 ribbon into 2 pieces exactly the same length. How long was each piece?

solve **check**

Each piece was _____ long.

② A space exhibit had 5 moon rocks. Each rock weighed 7.4 kilograms. What was the total weight of the moon rocks in the exhibit?

solve **check**

There were _____ kilograms of moon rocks in the exhibit.

③ A certain dinosaur's bones weighed 402.3 pounds. They had to be shipped in 3 crates. If all 3 crates were equal in weight, how many pounds of bones were in each?

solve **check**

There were _____ pounds of dinosaur bones in each crate.

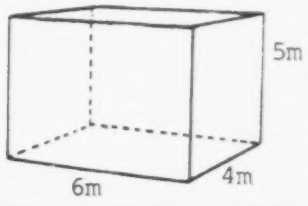
④ One very large space rock originally weighed 22.2 kilograms. It was cut into 3 equal pieces for the exhibit. How much did each piece weigh?

solve **check**

Each piece weighed _____ kilograms.

Do you remember?

Find the volume of the box below.



Volume = _____

P.O. 4.01.07.01

NAME: _____ CLASS: _____ DATE: _____

Complete each pattern. Write the rule.

There may be more than one operation in each series.

18, 15, 12, 9, 6, 3

Rule: subtract 3

2, 4, 3, 6, 5, 10, ☐, ☐, ☐

Rule: multiply by 2, subtract 1

3, 6, 12, 24, ☐, ☐, ☐

Rule: _____

5, 7, 9, 11, ☐, ☐, ☐

Rule: _____

7, 9, 6, 8, 5, 7, ☐, ☐, ☐, ☐

Rule: _____

CHALLENGE! Make up your own pattern. Write the rule.

☐, ☐, ☐, ☐, ☐

Rule: _____

P.O. 4.01.07.02

NAME: _____ CLASS: _____ DATE: _____

Follow the pattern to make the next three square arrays.
Write the square numbers.

Array	Square Number
•	
• • • •	
• • • • • • • • •	

168

P.O. 4.01.07.03

NAME: _____ CLASS: _____ DATE: _____

Follow the pattern to make the next four triangular shapes.
Write the triangular numbers.

Triangular Shapes	Triangular Numbers
	3

P.O. 4.01.08.01

NAME: _____ CLASS: _____ DATE: _____

Study the chart below. Use the information on the chart to help you answer the questions.

1980 Population of the Boroughs of New York City	
Borough	**Population**
Bronx	1,168,972
Brooklyn	2,230,936
Manhattan	1,428,285
Queens	1,891,325
Staten Island	351,121

1. Look at the population of Manhattan.

   The digit in the thousands place is _____.

   The digit in the millions place is _____.

   The digit in the hundred thousands place is _____.

2. Look at the population of Brooklyn.

   The digit in the ten thousands place is _____.

   The digit in the hundreds place is _____.

   The digit in the millions place is _____.

3. Which Borough's population has an 8 in the hundred thousands place?

   _____

4. The population of the Bronx was _____ in 1980.

   In this number, the 9 represents _____ and the 6 represents _____.

5. The population of Staten Island was _____ in 1980.

   In this number, the 3 represents _____ and the 2 represents _____.

P.O. 4.01.08.02

NAME: _____ CLASS: _____ DATE: _____

See how we grew! Study the chart. Use the information on the chart to answer the questions.

1984 Population of Countries around the World	
Country	Population
Brazil	134,386,123
Canada	25,142,654
India	746,388,512
United States	236,690,153

1. Look at the population of the United States.

   The digit in the millions place is _____.
   The digit in the hundred millions place is _____.

2. Which country has a population greater than 5 hundred million?

   _____

3. In 1984, the population of Brazil was 134,386,123. Draw a ring around the digit that represents 30,000,000.

4. In 1984, the population of Canada was 25,142,654. In this number, the 6 represents _____ and the 1 represents _____.

5. Which country's population has a 2 in the ten millions place?

   _____

Do you remember?

check	check	check
$3\overline{)\$4.26}$	$5\overline{)\$5.15}$	$2\overline{)\$8.44}$

P.O. 4.01.08.03-.04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

I. Write each numeral below in expanded form.

35,467,121 = _____

1,180,267 = _____

537,286,005 = _____

46,500,296 = _____

279,381,666 = _____

II. Write the standard numeral for each expanded numeral below.

3,000,000 + 500,000 + 20,000 + 1,000 + 900 + 60 + 7 = _____

40,000,000 + 800,000 + 6,000 + 200 + 70 + 8 = _____

200,000,000 + 50,000,000 + 4,000,000 + 600,000 + 40,000 + 2,000 + 800 + 60 + 1 =

_____

5,000,000 + 70 + 6 = _____

60,000,000 + 7,000,000 + 400,000 + 30,000 + 8,000 + 200 + 50 + 5 =

_____

P.O. 4.01.08.05

NAME:_____ CLASS:_____ DATE:_____

Follow the directions below.

I. Draw lines to match the numerals with the same amounts written in words.

100,987,654	four hundred sixty-three million, five hundred seventy-two thousand, one hundred
6,770,528	sixty million, seven hundred thirty-five thousand, five
463,572,100	thirteen million, one hundred twenty-six thousand, ninety-three
60,735,005	six million, seven hundred seventy thousand, five hundred twenty-eight
13,126,093	one hundred million, nine hundred eighty-seven thousand, six hundred fifty-four

II.

a. Write the numeral for seventeen million, two hundred seventy-six thousand, one hundred forty-four.

_____

b. Write 24,763,219 in words.

_____

_____

_____

CHALLENGE!

What is the probability of picking an ace from a full deck of cards?

The probability is_____.

SHARPENING YOUR SKILLS

Units 62,63,64

Name: _____ **Class:** _____ **Date:** _____

1. Find the quotient and check.

check

$4\overline{)12.8}$

2. Find the quotient and check.

check

$4\overline{)4.8}$

3. What is the area of a rectangle that is 2.4 meters long and .6 meters wide?

(a) 14.4 sq. meters

(b) 3.0 sq. meters

(c) 1.44 sq. meters

(d) Not Here

4 Complete the series.

1, 5, 9, 13, ___, __

5. Which of the following is a square number?

(e) 6 (g) 20

(f) 16 (h) Not Here

6. Draw the next triangular number.

1 3 6

7. Which numeral below has a 5 in the ten thousands column?

(a) 5,246,017 (c) 1,506,823

(b) 8,451,209 (d) 3,465,182

8. Which numeral below has a 7 in the millions place?

(e) 7,243,106 (g) 4,725,865

(f) 72,523,994 (h) Not Here

9. Which numeral means the same as 2,000,000 + 800,000 + 40,000 + 3,000 + 60 + 4 ?

(a) 284,364 (c) 2,843,064

(b) 2,843,604 (d) Not Here

10. Write the following numeral in words.

25,467

_____

_____

_____

11. Which numeral means the same as seventy-four thousand, nine hundred eighty-eight?

(e) 704,988 (g) 74,980

(f) 74,988 (h) Not Here

P.O. 4.06.08.01

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

I. Find the least common multiple for each pair of numerals below.

	Common Multiples	LCM
3	3, 6, 9, 12, 15	12
4	4, 8, 12, 16, 20	
2		___
5		

II. For each pair of fractions below, find equivalent fractions with a common denominator.

$\frac{1}{3}$ $\frac{1}{4}$ LCM of 3 and 4 = 12 $\frac{1}{3} = \frac{4}{12}$ $\frac{1}{4} = \frac{3}{12}$

$\frac{1}{2}$ $\frac{2}{5}$ LCM of 2 and 5 = ☐ $\frac{1}{2} =$ ☐ $\frac{2}{5} =$ ☐

$\frac{3}{8}$ $\frac{1}{4}$ LCM of 8 and 4 = ☐ $\frac{3}{8} =$ ☐ $\frac{1}{4} =$ ☐

P.O. 4.06.08.02-.03

NAME: _____ CLASS: _____ DATE: _____

Solve the examples below.

① LCM = 8

$\frac{1}{2} = \frac{4}{8}$

$+\frac{3}{8} = \frac{3}{8}$

$\frac{7}{8}$

② LCM = ☐

$\frac{2}{5} = $ ☐

$+\frac{3}{10} = $ ☐

☐

③ LCM = ☐

$\frac{2}{3} = $ ☐

$-\frac{3}{8} = $ ☐

☐

④ LCM = 8

$\frac{5}{8} - \frac{1}{4} = $ ☐

$\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$

⑤ LCM = ☐

$\frac{3}{5} - \frac{1}{10} = $ ☐

☐ - ☐ = ☐

⑥ LCM = ☐

$\frac{4}{9} + \frac{1}{3} = $ ☐

☐ + ☐ = ☐

⑦ LCM = ☐

$\frac{2}{3} = $ ☐

$-\frac{1}{4} = $ ☐

☐

⑧ LCM = ☐

$\frac{3}{6} + \frac{1}{2} = $ ☐

☐ + ☐ = ☐

⑨ LCM = ☐

$\frac{3}{12} - \frac{1}{6} = $ ☐

☐ - ☐ = ☐

CHALLENGE! Find the sum.

$$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} = \square$$

P.O. 4.06.08.04

NAME: _____ CLASS: _____ DATE: _____

Solve the problems below.

1. Millie bought $\frac{1}{2}$ pound of ham and $\frac{1}{4}$ pound of cheese. How much did the two items weigh together?

The ham and cheese weighed _____ pound.

2. Sandy bought $\frac{7}{8}$ pound of pistachio nuts and $\frac{3}{4}$ pound of cashews. How much more did the pistachio nuts weigh than the cashews?

The pistachio nuts weighed _____ pound more.

3. Jesse ran $\frac{3}{4}$ mile. He stopped to rest and then he ran $\frac{1}{8}$ mile farther. How far did Jesse run in all?

Jesse ran _____ mile.

4. Bill spent $\frac{1}{3}$ hour washing the dishes. Then he spent $\frac{1}{4}$ hour drying the dishes. How much more time did he spend washing dishes than drying them?

Bill spent _____ hour more washing the dishes.

P.O. 4.04.05.01

NAME: _____ CLASS: _____ DATE: _____

Multiply. Use the key to solve the riddle.

What begins with "e" and ends with "e" and has only one letter in it?

① 20 x10 = 200	② 20 x20	③ 30 x20	④ 40 x10	⑤ 70 x30
⑥ 60 x10	⑦ 40 x20	⑧ 30 x10	⑨ 40 x60	⑩ 20 x30

Key

A	E	L	N	O	P	V
200	600	800	400	300	2,400	2,100

Answer

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
A									

178

P.O. 4.04.05.02

NAME: _____ CLASS: _____ DATE: _____

Solve the examples below.

① 34 x20	② 14 x40	③ 72 x40	④ 65 x60
⑤ 53 x70	⑥ 91 x10	⑦ 32 x40	⑧ 44 x50
⑨ 52 x20	⑩ 43 x30	⑪ 15 x10	⑫ 22 x40

Do you remember? Find the area of a rectangle with a length of 3.2 meters and a width of 0.9 meters.

area = _____ square meters

P.O. 4.04.05.03 & .05

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

I. Complete each example.

① 32 x23	② 41 x22	③ 25 x11	④ 33 x22
⑤ 13 x33	⑥ 24 x22	⑦ 43 x12	⑧ 32 x32

II. Solve the problems below.

1. There are 22 rows in the auditorium. Each row has 22 seats. How many seats are there in the auditorium?

_____ seats

solve

2. How many eggs are there in 21 dozen?

_____ eggs

solve

P.O. 4.04.05.04-.05

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Complete each example.

① 35 x 23	② 42 x 54	③ 37 x 35	④ 87 x 32
⑤ 58 x 27	⑥ 63 x 45	⑦ 29 x 18	⑧ 36 x 72

B. Solve the problems below.

1. The school received 72 boxes of chalk with 24 pieces of chalk in each box. How many pieces of chalk were there in all?

____ pieces of chalk

solve

2. The school received construction paper in twelve different colors. There were 65 sheets of each color. How many sheets of construction paper did the school receive?

____ sheets of construction paper

solve

3. There were 93 packages of oaktag. Each package had 36 sheets of oaktag. How much oaktag was there in all?

____ sheets of oaktag

solve

SHARPENING YOUR SKILLS

Units 65,66

Name: _____ **Class:** _____ **Date:** _____

1. Solve.

$\frac{1}{3} + \frac{2}{6} = \square$

(a) $\frac{2}{3}$ (c) $\frac{3}{9}$

(b) $\frac{4}{6}$ (d) $\frac{3}{6}$

2. $42 \times 10 = \square$

(e) 402 (g) 420

(f) 142 (h) Not Here

3. How much more is $\frac{2}{3}$ than $\frac{1}{4}$?

(a) 1 (c) $\frac{3}{7}$

(b) $\frac{5}{12}$ (d) $\frac{11}{12}$

4. $\frac{\frac{8}{10}}{-\frac{2}{5}}$

(e) $\frac{1}{2}$ (g) $\frac{3}{10}$

(f) $\frac{6}{10}$ (h) Not Here

5. The ice cube maker in Danielle's refrigerator makes 18 ice cubes every hour. How many ice cubes can it make in 12 hours?

(a) 206 (c) 168

(b) 216 (d) 30

6. The road repair crew used $\frac{1}{2}$ barrel of tar yesterday and $\frac{1}{3}$ barrel of tar today. How many barrels of tar did they use during these 2 days?

(e) $\frac{5}{6}$ (g) $\frac{1}{6}$

(f) $\frac{1}{5}$ (h) Not Here

7. The chart shows how much time David spends exercising each week. Complete the chart. Remember! There are 52 weeks in a year.

Time David Spends Exercising

Exercise	Weekly	Yearly
Swimming	40 minutes	
Jogging	60 minutes	
Bicycling	35 minutes	
Total		

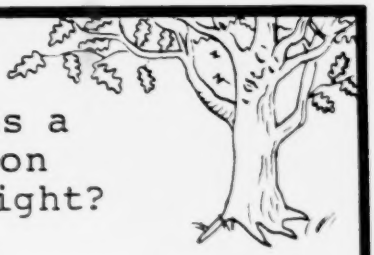
P.O. 4.04.06.01 & .04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Multiply. Use the key to solve the riddle.

Where does a tree go on Saturday night?



To a

1	2	3	4	5	6	7	8	9	10	11

① 100 x 10	② 200 x 10	③ 300 x 20	④ 700 x 30	⑤ 500 x 10	⑥ 600 x 20
⑦ 700 x 10	⑧ 300 x 30	⑨ 300 x 40	⑩ 400 x 10	⑪ 900 x 30	

Key

A	B	E	L	M	P	R	T	U	Y
9,000	21,000	5,000	1,000	6,000	7,000	12,000	4,000	2,000	27,000

B. Solve the problem below.

Three hundred barrels of oil were delivered to the Acme Oil Company. Each barrel holds 50 gallons of oil. How many gallons of oil were delivered?

_____ gallons

solve

Do you remember?

3.9	4.25	8.4	6.43	14.06
-1.2	+1.16	-2.15	+2.9	- 3.21

P.O. 4.04.06.02 & .04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Complete each example.

① 215 x 20	② 324 x 30	③ 705 x 50	④ 553 x 10
⑤ 816 x 40	⑥ 279 x 10	⑦ 571 x 20	⑧ 749 x 10
⑨ 366 x 30	⑩ 641 x 60	⑪ 928 x 50	⑫ 109 x 80

B. Solve the problems below.

1. A box contains 144 pencils. How many pencils will there be in 40 boxes?

_____ pencils

solve

2. Mr. Carter drives a total of 315 miles to and from work each week. How many miles does he travel in 10 weeks?

_____ miles

solve

184

P.O. 4.04.06.03-.04

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Complete each example below.

①	②	③	④
318 x 52	194 x 83	563 x 34	435 x 28
⑤	⑥	⑦	⑧
756 x 65	225 x 15	624 x 25	845 x 72

B. Solve the problems below.

1. There are 27 packages of dinner napkins on the supermarket shelf. If there are 125 napkins in each package, how many napkins are there in all?

_____ napkins

solve

2. Find the area of a field that is 243 feet long and 29 feet wide.

_____ sq. ft.

solve

P.O. 4.05.07.01 & .03

NAME:_____ CLASS:_____ DATE:_____

Follow the directions below.

A. Find the quotients and check.

① check $10\overline{)45}$	② check $10\overline{)79}$
③ check $30\overline{)62}$	④ check $40\overline{)92}$
⑤ check $20\overline{)86}$	⑥ check $50\overline{)68}$

B. Solve the problems.

1. Jerry had 80 pennies. He made stacks of 20 pennies each. How many stacks did he make?

   He made ____ stacks.

   solve check

2. Mandy baked 44 cookies. If she puts 10 cookies on each plate, how many plates will she need? How many cookies will be left over?

   She will need ____ plates.

   There will be ____ cookies left over.

   solve check

P.O. 4.05.07.02-.03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Find the quotients and check.

① check $10\overline{)360}$	② check $10\overline{)592}$
③ check $40\overline{)441}$	④ check $30\overline{)965}$
⑤ check $50\overline{)605}$	⑥ check $80\overline{)892}$

B. Solve the problems below.

1. There are 320 beads. If 10 beads are placed on each bracelet, how many bracelets can be made? ____ bracelets	solve check
2. There are 480 students in the auditorium. If 20 students sit in each row, how many rows of students are there? ____ rows	solve check

P.O. 4.05.08.01 & .03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Divide and check.

① check $15\overline{)64}$	② check $11\overline{)95}$
③ check $22\overline{)78}$	④ check $31\overline{)93}$
⑤ check $41\overline{)77}$	⑥ check $28\overline{)84}$

B. Solve the problem below. Check your answer.

① Sue collected 90 pine cones for her nature study class. If she puts 15 pine cones in each bag, how many bags will she need? _____ bags	solve check
② Randy picked 78 daisies. If he places 12 daisies in each vase, how many vases will he fill? He will fill _____ vases. There will be ____ extra daisies.	solve check

188

P.O. 4.05.08.02-.03

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

A. Divide and check.

① $11\overline{)135}$ check	② $25\overline{)650}$ check
③ $34\overline{)378}$ check	④ $28\overline{)570}$ check
⑤ $19\overline{)399}$ check	⑥ $41\overline{)945}$ check

B. Solve the problem below.

A box of cereal weighs 252 grams. If one serving of cereal weighs 21 grams, how many servings does the box of cereal contain?

____ servings

solve check

Do you remember?

The least common multiple of 3 and 4 is _____.

The least common multiple of 4 and 6 is _____.

The least common multiple of 5 and 7 is _____.

SHARPENING YOUR SKILLS

Units 67, 68, 69

Name: _____ **Class:** _____ **Date:** _____

1. 300
x 40

(a) 1,200 (c) 120

(b) 12,000 (d) Not Here

2. 436
x 50

(e) 2,180 (g) 21,800

(f) 20,500 (h) Not Here

3. Find the product.

217
x 33

4. $10\overline{)830}$

(a) 8 R3 (c) 83 R3

(b) 80 R3 (d) Not Here

5. $21\overline{)448}$

(e) 20 R8 (g) 21 R7

(f) 22 (h) Not Here

6. A bakery delivered 420 cookies in boxes of 10 cookies each. How many boxes of cookies were delivered?

_____ boxes of cookies

7. There are 144 pencils in a box. How many pencils will be in a dozen boxes?

_____ pencils

8. The book Nat is reading has 180 pages. If Nat reads 15 pages each day, how many days will it take him to finish the book?

_____ days

9. Sandy has 624 pennies. If she makes stacks of 20 pennies each, how many stacks can she make? How many pennies will be left over?

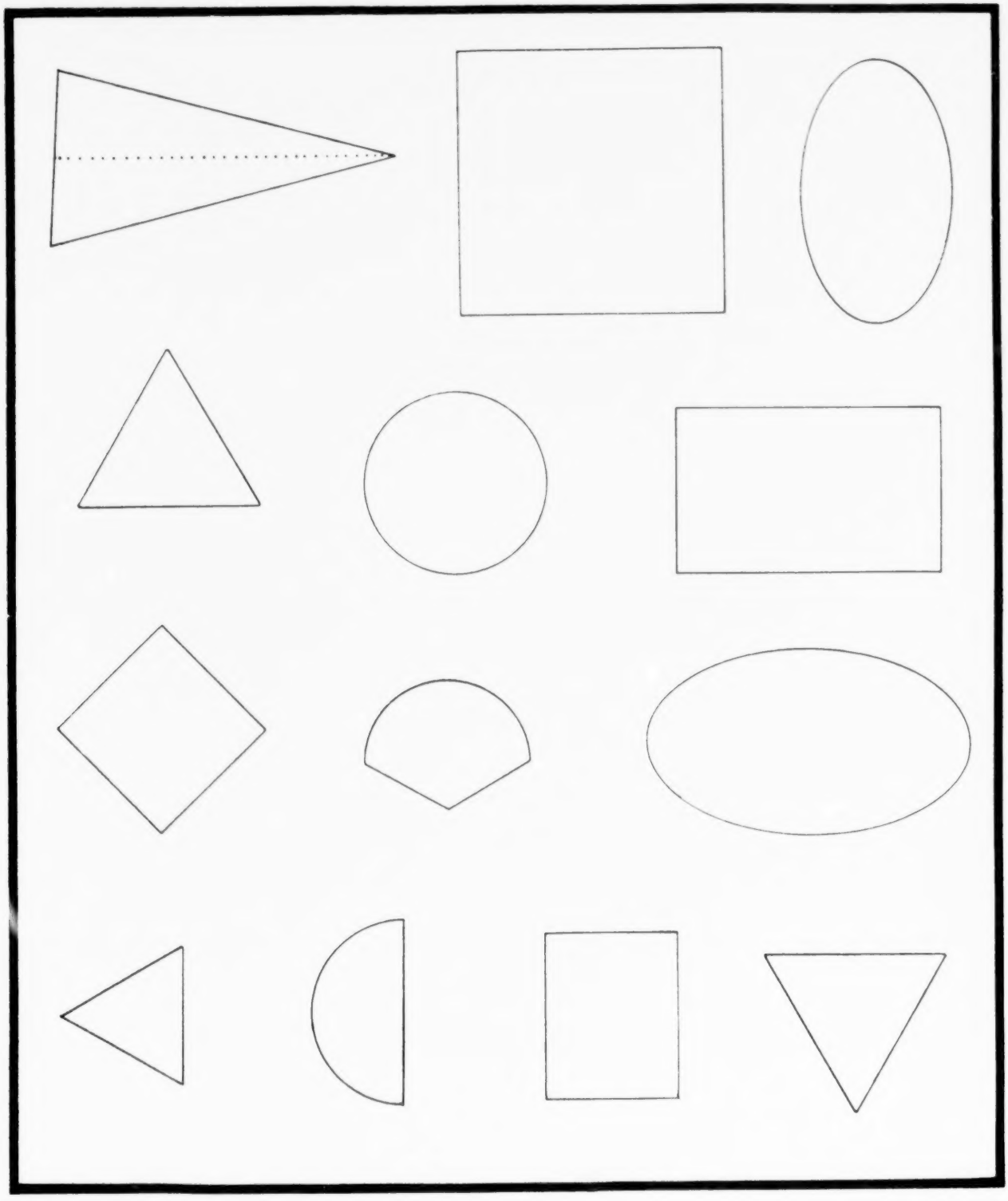
_____ stacks

_____ pennies left over

P.O. 4.09.06.01

NAME: _____ CLASS: _____ DATE: _____

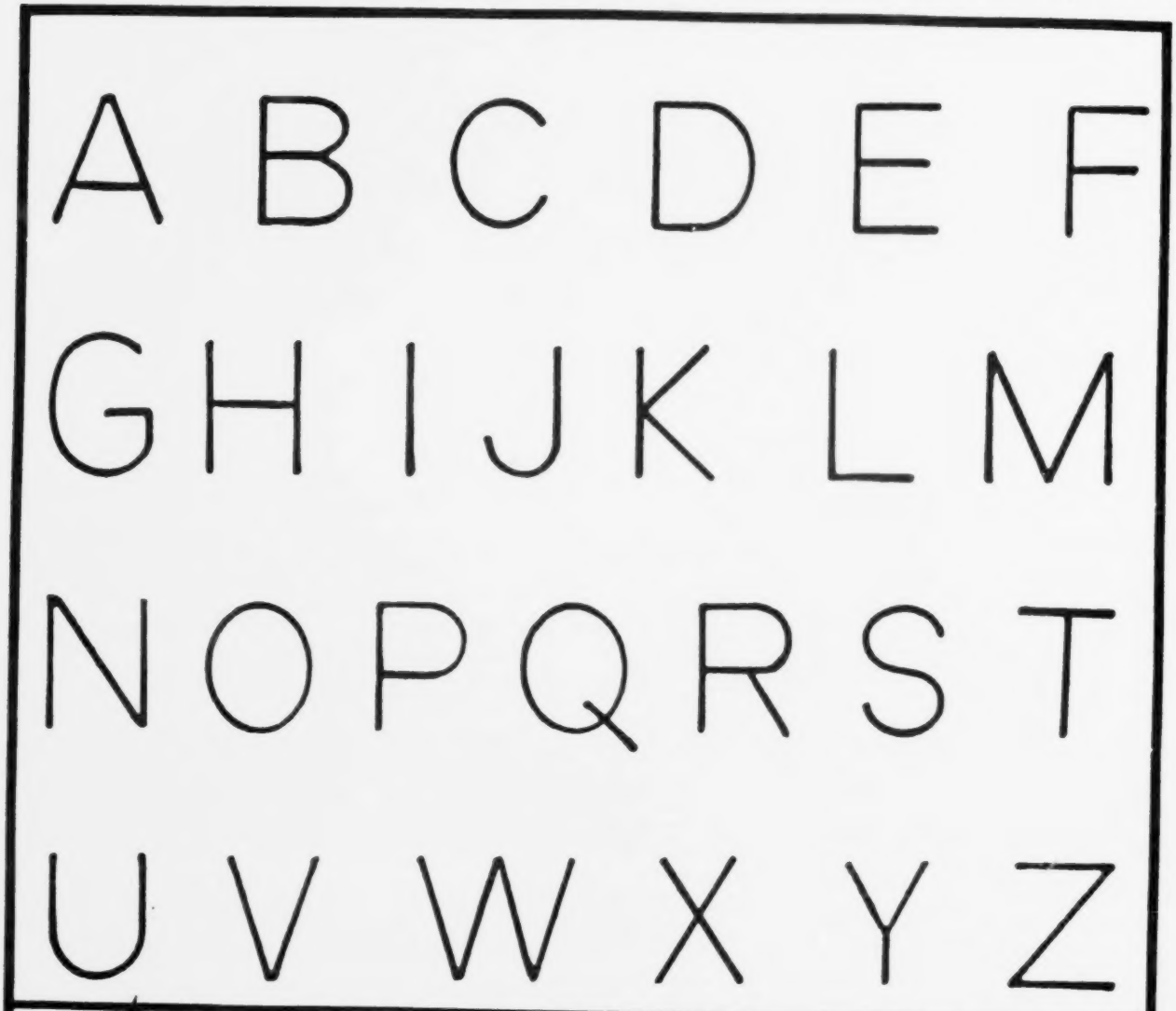
Draw one or more lines of symmetry for each shape.



P.O. 4.09.06.02

NAME: _____ CLASS: _____ DATE: _____

Find the letters which have lines of symmetry. Draw the line of symmetry.



CHALLENGE! Print two more words that have a line of symmetry. Draw the line of symmetry.

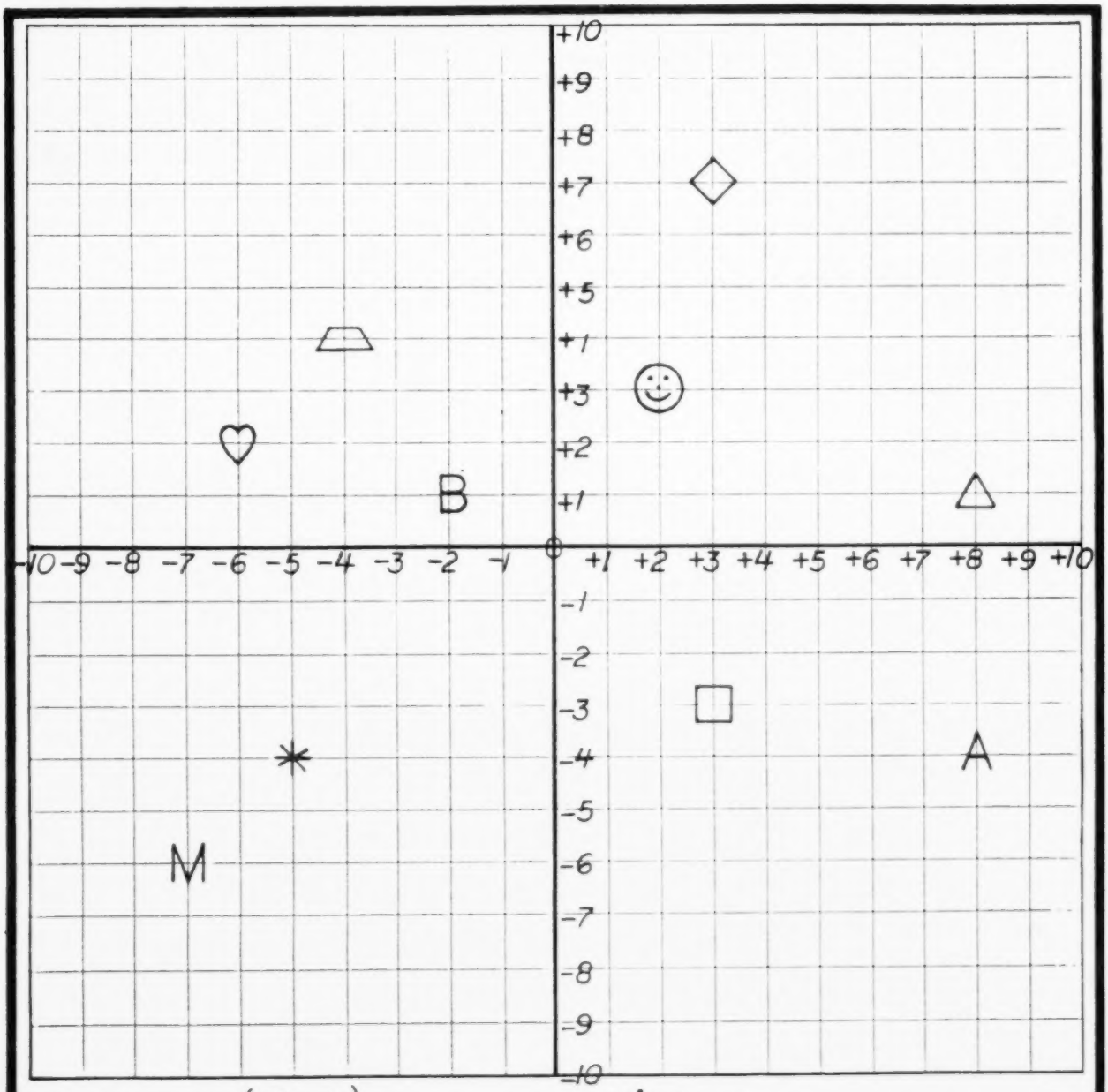
B E D _____ _____

192

P.O. 4.09.07.01

NAME: _____ CLASS: _____ DATE: _____

Locate the coordinates.



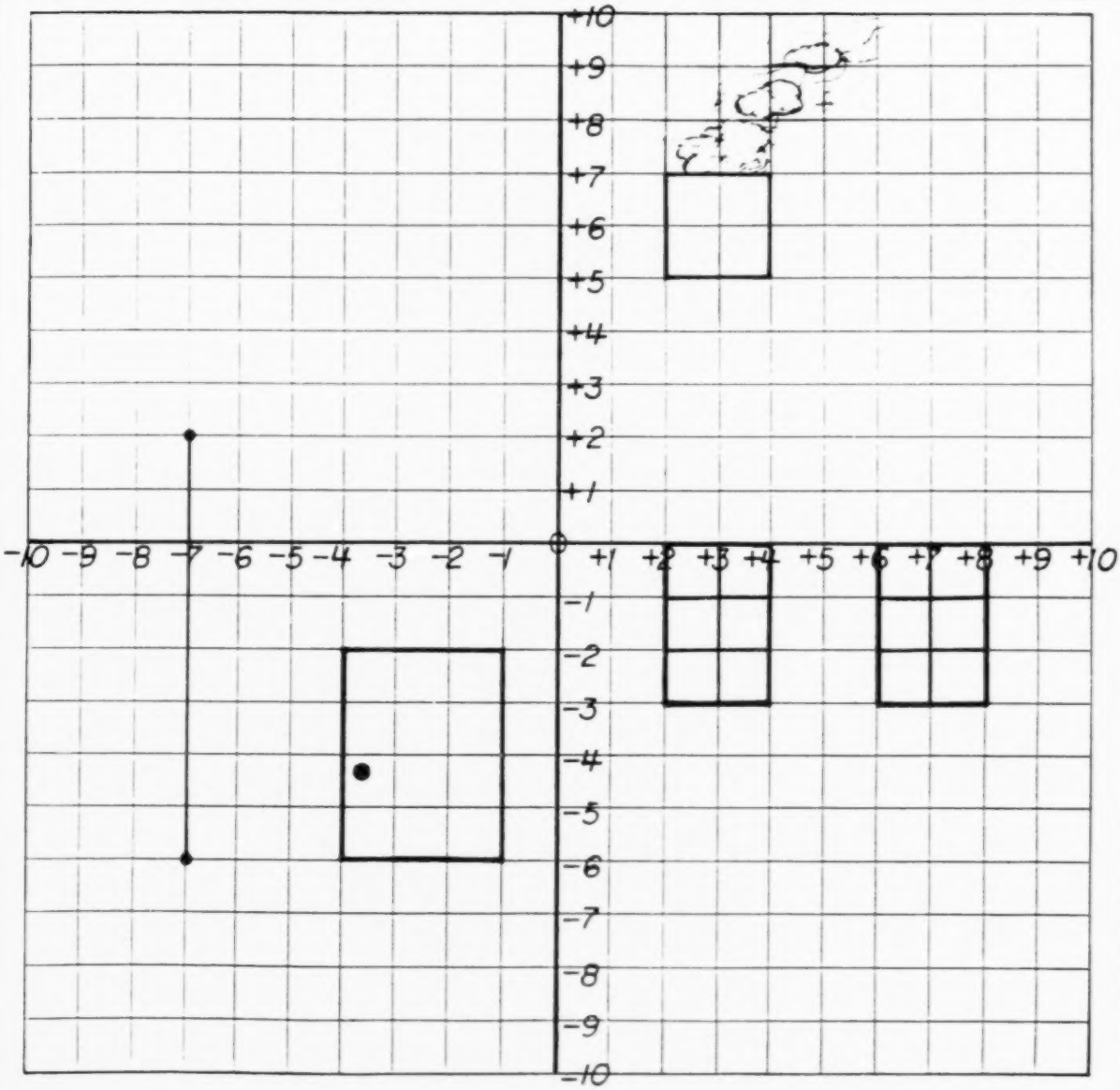
The B is at (-2, 1).
The ♡ is at _____.
The ◇ is at _____.
The □ is at _____.
The ✳ is at _____.

The △ is at _____.
The ⏢ is at _____.
The M is at _____.
The A is at _____.
The ☺ is at _____.

P.O. 4.09.07.02

NAME: _____ CLASS: _____ DATE: _____

Locate the coordinates. Connect the points in order.



① (-7,-6)
② (-7,2)
③ (-3,6)
④ (1,2)
⑤ (1,-6)
⑥ (-7,-6)
⑦ (1,-6)
⑧ (9,-5)
⑨ (9,2)
⑩ (6,6)
⑪ (-3,6)
⑫ (-7,2)
⑬ (1,2)
⑭ (9,2)

P.O. 4.09.08.01

NAME:_____ CLASS:_____ DATE:_____

Follow the directions below.

Draw two circles, one inside the other, in this space.	Draw a square in this space.
Draw a triangle in this space.	Draw a parallelogram in this space.

CHALLENGE!

Draw a circle with a radius of 2 cm.

Hint: Draw the radius first.

P.O. 4.06.09.01

NAME: _____ CLASS: _____ DATE: _____

Follow the directions below.

Write a ratio for each picture below.

①

The ratio of socks to shoes is _____ to _____.

②

The ratio of knives to forks is _____ to _____.

③

The ratio of girls to boys is _____ to _____.

The ratio of girls to all the children is _____ to _____.

④

The ratio of circles to squares is _____ to _____.

The ratio of squares to all the figures is _____ to _____.

Write each ratio below as a fraction.

⑤

The ratio of black marbles to white marbles is _____.

The ratio of white marbles to all the marbles is _____.

⑥

The ratio of cats to birds is _____.

The ratio of birds to cats is _____.

Do you remember?

Round each number to the nearest hundred.

279 rounds to _____.

3,420 rounds to _____.

741 rounds to _____.

14,501 rounds to _____.

198

P.O. 4.06.09.02

NAME: _____ CLASS: _____ DATE: _____

Solve the problems below.

1. Jackie set the table with 4 knives, 4 forks, and 4 spoons. What is the ratio of forks to all the items?

_____ to _____

2. The ratio of boys to girls in class 4-408 is $\frac{14}{18}$.
How many students are in the class?

_____ students

3. Martha's punch recipe calls for 1 cup of orange juice and 2 cups of cranberry juice. If she wants to double the recipe, she should use 2 cups of orange juice and ____ cups of cranberry juice.

4. The ratio of pencils to students is 24 to 6. If the students share the pencils equally, how many pencils will each student get?

_____ pencils

5. If 2 pens cost 40¢, what will 4 pens cost?

4 pens will cost _____

6. There are 30 students in class 4-201. If 12 of the students are boys, what is the ratio of boys to girls?

_____ to _____

CHALLENGE!

There were 12 boys and 15 girls in the library. Two boys and two girls left the library. Then, four more boys and five more girls came into the library. What is the ratio of boys to girls now?

The ratio of boys to girls is _____ to _____.

SHARPENING YOUR SKILLS

Units 70, 71, 72, 73

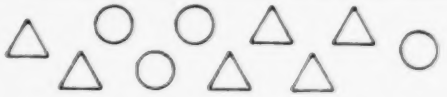
Name: _____ Class: _____ Date: _____

1. Draw a ring around the letter below that has a line of symmetry. Draw the line of symmetry.

F L M Z

2. Draw two lines of symmetry in the figure below.

3. Use a ruler to draw a square. Each side should measure 1 inch.

4. 

The ratio of circles to triangles is ___ to ___.

5. The ratio of girls to boys in your class is ____ to ____.

6. If 3 pretzels cost 10¢, what will 6 pretzels cost?

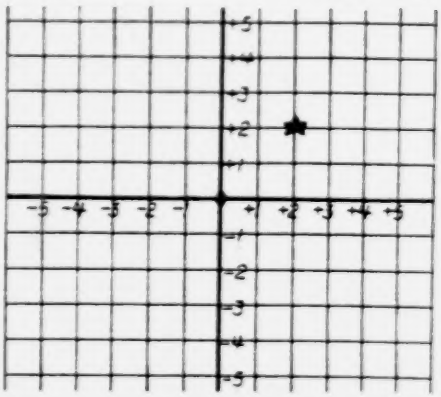
(a) 16¢ (c) 9¢

(b) 20¢ (d) Not Here

7. If 4 pencils cost 20¢, what will one pencil cost?

(e) 5¢ (g) 16¢

(f) 24¢ (h) Not Here

8. 

(a) Place an X at (3,4).

(b) Place a Z at (-2,-1).

(c) Draw a ☺ at (5,-2).

(d) Draw a △ at (-4,4)

(e) The star is at (__,__).